

Responsiveness Summary to 2020 Comment Period on Draft Solid Waste Management Rules

This responsiveness summary was developed to reply to comments from two public meetings, the meetings occurred on Wednesday, March 18, 2020 and on Monday, March 23, 2020. Due to the Covid-19 constraints on public meetings the meetings were conducted virtually using Skype and by providing a teleconference number for call ins. The public comment period was to end on April 7, 2020 but was extended by request for two weeks until April 21, 2020. The Solid Waste Program received written comments from 10 entities which totaled 185 individual comments.

All received comments have been organized, by section within their respective subchapters. Original comments are in black text, while the Secretary's responses are provided after the comment in blue text.

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Subchapter 1 – Purpose

§ 6-104 Fees

- 1) If municipalities are exempt from fees, municipal ownership of facilities should be the relevant factor, not facility operator. *Please consider removing “Facilities operated by a private entity are required to pay relevant fees” and relying on the language in (c).*

Response: The Program disagrees that municipal ownership is the sole factor in determining fee payment. § 6-104(c) identifies the considerations in determining if a private applicant, operating as a contracted service provider, is able to be considered for the fee exemption. No changes have been made.

Subchapter 2 – General Definitions and Acronyms

§ 6-201 Definitions

- 2) “Adjoining Residences and Landowners”; The definition has stripped out adjoining residences, despite the definitional title. Not all Vermonters can afford to own real estate, many rent, particularly those at the lower end of the income spectrum. The changes proposed would deny these residents who reside directly adjacent to solid waste facilities such as landfills and large transfer stations public notice as they are simply tenants and not landowners. This change is inappropriate and smacks as an environmental justice issue. *Please keep current definition or amend the definition proposed to include adjoining residents as the original definition intended.*

Response: The intent is to notify all adjacent landowners consistent with the requirements of 10 V.S.A 170 and the standard Notification Procedures that have been adopted by the Department. The Environmental Notice Bulletin (ENB) will contact all persons who properly subscribe to the ENB, providing the opportunity for notification for any interested party, regardless of property ownership. The Department of Environmental Conservation encourages all Vermonters to subscribe the ENB. The Solid Waste Program will develop a policy to ensure that residents also receive notification.

- 3) “Architectural Waste”; Please consider narrowing the definition to clean drywall from construction, as discarded drywall from demolition cannot be recycled.

Response: The Program agrees with the comment; however, the definition is directly from statute, these rules will remain consistent with that statute. However, the Program has developed a [policy](#) stating that the interpretation of architectural waste drywall is new and clean, with demolition drywall only being diverted as achievable.

- 4) “Asbestos Waste”; Consider the addition of definitions of Friable Asbestos Waste and Non-Friable Asbestos Waste to distinguish between the two categories within the existing definition of Asbestos Waste.

Response: Friable asbestos is mentioned in the Rules 6-1006 (8) re: waste control plans, therefore a definition is appropriate. The following definition has been added:

“Friable asbestos” means any asbestos containing material that can be crushed, crumbled, pulverized or turned to powder with the ordinary force of a human hand.

- 5) “Closure” and “Clean Wood”; Correct formatting issue at the top of page 11 to separate out the definition of “Clean wood”; it is currently embedded in the definition of closure.

Response: This has been corrected.

- 6) “Composting” means the controlled **aerobic** biological decomposition of organic matter through active management to produce a stable humus-rich material compost (as that term is defined in 10 V.S.A. §6602 and subchapter 11 of these Rules). **Comment:** Adding “aerobic” brings this in line with **§ 6-1102 Organic Specific Definitions (e)** “Compost” means the product of composting; consisting of a group of organic residues or a

mixture of organic residues and soil that have been piled, moistened, and allowed to undergo aerobic biological decomposition. means a stable humus-like material produced by the controlled biological decomposition of organic matter through active management, but shall not mean sewage, septage, or materials derived from sewage or septage.

Response: The Program agrees and has changed the definition to read:

“Composting” means the controlled aerobic biological decomposition of organic matter through active management to produce ~~a stable humus-rich material~~ compost (as that term is defined in 10 V.S.A. §6602 and subchapter 11 of these Rules).

- 7) “Construction and Demolition Debris”; Please consider removing furniture and mattresses from this definition. The discarding of furniture and mattresses occurs aside from construction and demolition. Consider adding a definition for “Bulky Waste” for these items.

Response: The Program has had construction and demolition (C&D) debris operators ask if furniture or mattresses had to be pulled out of C&D loads as they were not previously included within the definition. The program does not require exclusion of these materials from C&D loads if they occur incidentally to a C&D project, and so they have been added to the definition to provide this clarity. The term Bulky Waste is not used in the rules so does not need to be defined. The definition has been changed for additional clarity based on this comment and now reads:

“Construction and Demolition Waste” or “C&D” means waste derived from the construction or demolition of buildings, roadways or structures, including, but not limited to, clean wood, treated or painted wood, plaster ~~sheetrock~~, drywall, roofing paper and shingles, insulation, glass, ~~stone, soil~~, flooring materials, brick, masonry, mortar; and stone, soil, metal, furniture, and mattresses that are present incidental to building demolition. This definition includes architectural waste. This definition does not include asbestos waste, regulated hazardous waste, hazardous waste generated by households, or hazardous waste from conditionally exempt generators.

- 8) “Food residual”: ...does not mean or meat-related products when the food residuals are composted by a resident onsite." *Does this prohibit home and community composters from using an appropriate system, such as an invessel (e.g., Jora), which is fully enclosed and wildlife resistant. These systems also reach PFRP temperatures when managed properly. Or, Green Cones, while not composters, these do effectively process meats and are promoted as an organics management tool for smaller scale compost systems.*

Response: This language does not prohibit residents that want to compost their food residuals at home from composting meat or bones. If backyard composters have a system that is capable of composting meat and bones and wish to include those materials, they are free to do so, but they are not required to. Note: for consistency this is the exact definition of food residuals from statute (10 V.S.A. § 6602(31)).

- 9) “Organics” means any carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and non-recyclable paper products. Some facilities, such as WSWMD and Green Mt. Compost also accept kitty litter from residents. Manures, particularly chicken, rabbit, goat, and even other livestock manures and bedding are promoted for composting all systems – from home and community to commercial/industrial. *If the definition includes manure (livestock, not pet), the types of acceptable manures should be stated in order not to add confusion. Moreover, it might be beneficial to include an additional separate definition of manure and bedding.*

Response: The Program understands and agrees with the commenter’s point that there are many materials outside this definition that qualify as “organic”. The intent of all listed definitions is to provide necessary context for how each term will be used within the Solid Waste Management Rules. There are many organic materials that make fantastic composting feedstocks, however they are not required to be managed by haulers, transfer stations, etc. as a solid waste (i.e. human & pet feces, livestock manures), and therefore they have been left out of this

definition as applicable to the activities regulated by these rules. We've clarified through the below definition revision that this term applies only to organic materials that meet the definition of solid waste.

"Organics Solid Waste" means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition of organics.

- 10) "Discrete Disposal Facilities" – this term along with its definition has been struck from the Rule in your draft. This term is struck throughout the document and replaced with "landfill". While the change to the using the term "landfill" is a good clarification, it is important to now add a definition for "Landfill" upfront in the definitions section. I will let you define it, but it does need to be defined.

Response: Agreed, a definition for landfill would be beneficial. The following has been added and is derived from the statutory definition:

"Landfill" means a land disposal facility employing an engineered method of disposing of solid waste on land in a manner that minimizes environmental hazards by spreading the solid waste in thin layers, compacting the solid waste to the smallest practical volume, and applying and compacting cover material at the end of each operating day.

- 11) "Diversion" – this is a totally new definition. It is inconsistent with statute in that it states in relevant part: "Diversion" means the management of solid wastes through methods other than disposal. Diversion includes recycling, composting, **reuse** and anaerobic energy production." For a material to become a solid waste, the material must first be "discarded". To reuse a material for a different application than it was originally used for occurs prior to it being discarded and becoming a regulated solid waste. Please remove the word reuse from this definition as characterizing a material that is being reused as a solid waste is inconsistent with Vermont law.

Response: The program disagrees that the concept of material reuse being considered a diversion activity conflicts with statute. Diversion is used in several places throughout the solid waste statute, including within 10 V.S.A. § 6604, where the statewide solid waste management plan is required to promote "the reuse and closed-loop recycling of waste" (§6604(a)(1)(C)). The 2014 and 2019 Vermont Materials Management Plans defined "diversion rate" as "the measurement of the amount of waste diverted (by composting, reusing, and recycling materials), divided by the sum of waste diverted and waste disposed (at disposal facilities, landfills and incinerators)". Therefore, the definition included within these proposed rules is in line with the purpose and intent of both statute and the statewide materials management plan. Diversion will remain a solid waste term, used to cover the wide array of beneficial uses, like recycling and including reuse, for wastes that have been discarded by their original owner.

- 12) "Diversion"; The use of approved alternative daily cover materials at landfills replaces the use of clean soil as cover, in the same manner as the reuse of potential waste materials in any other construction project. Despite being used within the footprint of the landfill, alternative daily cover materials are not used for disposal, and should meet the definition of diversion. Please consider removing the exclusion for alternative daily cover at landfills in this definition.

Response: The proper use of the material outside of a landfill would meet the definition of Diversion. If the material is destined for disposal in the landfill and can be used as an alternative daily cover, the material may be used but the use within the landfill footprint does not qualify as a diverted material. The definition has not been changed.

- 13) "Drinking Water Source"; Consider striking "used or". The definition of a drinking water source should depend on whether the source is permitted for use as drinking water, not whether someone is choosing to use it without a permit.

Response: There are unpermitted drinking water sources that are currently in use providing potable water. In addition to those that are unpermitted, but should hold a permit, there are some that predate the Department's permitting process and these historical sources require protection as well. The language has not been changed.

- 14) "Final Grades"; Please consider replacing "prior to" with "at" within the definition.

Response: The Program disagrees with the removal of "prior to" from this sentence. Final grades are the slopes prior to closure. However, the Program agrees that this definition is problematic in consideration of the process of overfilling to allow for settlement prior to achieving final grades. The Program is amending this definition to address the fact that the slopes at final grade may not necessarily be the maximum slopes over the lifetime of the landfill. The definition now reads:

"Final Grades" means the ~~maximum~~ authorized slopes and in-place volume of waste and cover materials achieved prior to final closure.

- 15) "Food Residuals"; Clarify what constitutes as "on site" in reference to meat and bones by residents. Consider changing on-site to "back yard composting".

Response: The term "on site" as used in the above referenced definition – *"Food residual" does not mean meat and meat-related products when the food residuals are composted by a resident on site* refers to material generated by a resident and managed on the same property. That language is taken from the definition of food residuals in 10 V.S.A. § 6602(31), and the Program would like to maintain the same wording for consistency. No changes have been made.

- 16) "Food residual" means source separated and uncontaminated material that is derived from processing or discarding of food and that is recyclable in a manner consistent with 10 V.S.A. § 6605k. Food residual includes pre-consumer and postconsumer food scraps. **"Food residual" does not include meat and meat-related products when these materials are composted by a resident on site.** **Question:** Is the highlighted text being called out because meat and eat-related products are can still be landfilled, under the Universal Recycling Law? I imagine that this is not restricting residents from composting meat and meat-related products (in backyard systems), should they choose? Some of the compost tumblers CAV promotes reach PFRP temps, and residents are in fact composting meat and bones in them. Green Cones are also promoted for residential disposal of these materials. Note that this definition also appears in **§ 6-1102 Organic Specific Definitions**; item (p).

Response: This language does not prohibit residents who choose to compost their food residuals at home from composting meat or bones. If backyard composters have a system that is capable of composting meat and bones and wish to include those materials, they are free to do so, but they are not required to. Note: for consistency, this language is taken directly from the definition of food residuals from statute (10 V.S.A. § 6602(31)).

- 17) "Hazardous Materials"; The definition as written does not appear to incorporate any exclusions, such as for household materials.

Response: Household hazardous materials are hazardous materials. However, they are individually defined and have been provided with exemptions by the Rule. The inclusion of these exemptions within the definition would not provide greater clarity to these rules and no changes have been made.

- 18) VAAFM requests that the inclusion of the following definition: "Required Agricultural Practices Rule (RAPs)" means the Vermont Required Agricultural Practices Rule adopted pursuant to 6 V.S.A. § 4810.

Response: The Program will add language to the definitions and RAPs to the acronym listing. The addition will read:

“Required Agricultural Practices Rule” or “RAPs” means the Vermont Required Agricultural Practices Rule adopted pursuant to 6 V.S.A. § 4810.

- 19) “Nuisance”; To be more consistent with how nuisance has previously been defined in Vermont, we suggest the following revised definition: “Nuisance” means anything that is injurious to human health or is indecent or offensive to the senses and occurs as the result of the storage, transport, processing, or disposal of solid wastes. Constitutes the unreasonable and substantial interference with the comfortable enjoyment of life or property and affects any considerable number of persons at the same time.

Response: The Program disagrees with the proposed additional language. A nuisance is difficult to validate, but the addition of unreasonable and substantial to consideration of interfering with comfortable enjoyment of life or property does not offer improvement, and to some degree weakens the standard. The addition of unreasonable or substantial presumes a baseline level of acceptable interference before a nuisance condition is attained, which is not the intent of the nuisance standard.

- 20) “Organics” means any carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition of organics. **Comment:** Although not called out specifically, I assume that manures fall under the highlighted part of this definition.

Response: Correct, manures that fall under the definition of solid waste are included in this definition. We’ve clarified, through the definition revision below, that this term applies only to organic materials that meet the definition of solid waste.

“Organics Solid Waste” means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition of organics.

- 21) “Organics” – this proposed term is used inconsistently throughout the draft Rule document. The second sentence of this very definition interchanges the term “organic materials” for “Organics”. The term Organics is really slang for Organic Materials and doesn’t belong in a regulation as a regulatory term. I would suggest changing the term from “Organics” to “Organic Materials” both here and throughout the document. In the alternative (although I believe street slang should not be used in a Rule), you at very least could change the term being defined to ““Organics” or “Organic Material””, which would allow for two terms to be interchanged throughout the Rule document as occurs in the current draft Rule.

Response: The Program agrees that “organics” should be replaced with “organic solid waste”. We’re proposing the following definition revision.

“Organics Solid Waste” means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition of organics.

- 22) “Organic Drop-Off” means a registered facility that is not located on a certified solid waste facility and is approved for the collection of food residuals. **Comment:** My understanding of this is that an “Organic Drop-Off” site requires subsequent transport of collected organics to a site, and does not include collection of organics **at** a composting site. An example of this would be a community composting site, where people drop off organics for later integration into the composting system. In this case, the collections area is part of – and not separate from – the site. In contrast, if a business wanted to allow their employees to bring food scraps from home to the

businesses organics tote (or dumpster), they would need to register their business with ANR as an “Organic Drop-Off” site. Is this correct?

Response: Correct, this definition is only applicable to transfer activities. A location that receives food residuals and composts them would either qualify for an exemption from the composting certification requirements, or obtain the necessary registration or certification subject to Subchapter 11.

For additional clarity, and in consideration of comments 23 and 24 below, the definition has been revised to read:

“Food Residual Drop-Off” means a registered facility that is not located ~~on~~ at a certified solid waste facility and is approved only for the collection of food residuals.

- 23) “Organic Drop-Off”. Typo / inconsistency. As provided above, change term to (preferably) read as “Organic Materials Drop-Off” or (less-preferred) “Organics Drop-Off”.

Response: Noted, and revised to the following, as per comment 22 above:

“Food Residual Drop-Off” means a registered facility that is not located ~~on~~ at a certified solid waste facility and is approved only for the collection of food residuals.

- 24) “Organic Drop-off”; Consider replacing “on” with “at” at certified waste facility.

Response: Agreed, and in consideration of comments 22 and 23 above, this definition has been revised to read:

“Food Residual Drop-Off” means a registered facility that is not located ~~on~~ at a certified solid waste facility and is approved only for the collection of food residuals.

- 25) “Organics Recovery Facility” or “ORF” means a facility where organic materials are collected, treated, and/or stored in preparation for transfer to an anaerobic digester or compost operation. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester.

We assume this definition is for collection of materials at sites for anaerobic digestion processing. If this is the case it should be further clarified as to how it differs from an “Organic Drop-Off.”

Response: This was a common comment. The Program is proposing to change the terms to help add clarity. Additionally, the activity type criteria in Subchapter 12 (summarized below) further explain the differences in these two activities.

§ 6-1202(a) ~~Organics~~ Food Residual Drop-Off Facilities. Facilities that accept solely food residuals at a volume of less than 144 gallons per week shall register with the Secretary pursuant to § 6-1206 of this subchapter.

§ 6-1202(c) ~~Organics~~ Solid Waste Recovery Facilities (ORF). Facilities that aggregate food residuals and process them into a slurried form for delivery to an organics management facility. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester. The facilities must obtain a certification pursuant to subchapter 9.

- 26) “Organics Recovery Facility” or “ORF” means a facility where organic materials are collected, treated, and/or stored in preparation for transfer to an anaerobic digester or compost operation. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester. **Question:** How are these different than “Organic Drop-Off”?

Response: See response to #25 above.

- 27) “Organics Recovery Facility” or “ORF”. The proposed new definition states in relevant part: “Organics Recovery Facility” or “ORF” means a facility where organic materials are collected, treated, and or stored in preparation for” This facility would actually be the recipient of “discarded” organic materials. For regulatory clarity and consistency with statute, please amend the proposed definition as follows: “Organics Recovery Facility” or “ORF” means a facility where **discarded** organic materials are collected, treated, and or stored in preparation for”

Response: Agreed, however, rather than adding the term discarded to this definition, we are changing the term and definition to indicate that it’s an organic solid waste recovery facility. By definition a solid waste is discarded.

“Organics Solid Waste Recovery Facility” or “ORF” means a facility where organic ~~materials~~ solid wastes are collected, treated, and/or stored in preparation for transfer to an anaerobic digester or compost operation. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester.

Subchapter 3 – Applicability, Exemptions, and Prohibitions

§ 6-302 Exemptions

- 28) (a) (11); Glycerol exemption: Please consider the addition of municipal anaerobic digesters to this list.

Response: Agreed, municipal digesters will be added to the exemption.

- 29) (a)(16)(L); Heavily-bedded **horse** manure (carbon to nitrogen ratio of 22-50:1); **Comment:** Suggest striking the word “horse”. Other types of bedded manure may meet the specified C:N of 22-50:1.

Response: This list is for approved high carbon bulking agents permitted to be used at small compost facilities. The idea is that the list is clear and concise, and no other conditions that apply. Other well-bedded manures may at times meet this carbon to nitrogen ratio, but it would be variable and would have to be verified on a case-by-case basis, so it’s not appropriate to include on this exemption list. Small facilities can still compost other manures if they choose, just not as a recognized high-carbon bulking agent.

- 30) (a)(15)(B)(iv) Processed Glass Aggregate Drainage Applications; Consider the addition of “(III) Leachate and landfill gas collection structures within landfills” to the approved list of Exemptions for Drainage Applications.

Response: The Program agrees that the use of Processed Glass Aggregate may be appropriate for some drainage applications within landfills. However, rather than provide a comprehensive exemption for this practice within the Rules, the Program will approve the use of these materials on a case by case basis as they are incorporated into submitted and approved design and operational plans for a permitted facility.

§ 6-303 Waiver of Technical Standards

- 31) The inclusion of these conditions (A), (B) and (C) opens the door to allowing political whims of any Presidential or Governmental administration to undermine the protection of the public and environmental health that must be the primary concern of these SWM Rules. For example, vis a vis (A), the current President has turned back the Clean Air and Clean Water Acts, enacted by the previous administration in an effort to combat release of toxins into our nation’s air and water by industry. If this clause 6-303 is not struck, for example, it would be permissible for the conditions imposed by the District Environmental Commission in August, 2019 on NEWSVT, banning the disposal of toxic leachate into Lake Memphremagog, to be overturned based on the current President’s whim. In the language of (B), what burden of proof would be required that would allow the Secretary to “waive technical and siting requirements of these Rules”? The State of Vermont must commit to the highest and most stringent scientific standards for the protection of Vermont’s environment and people, regardless of what standards the Federal government imposes, unless they be more stringent than those currently imposed by the State of Vermont.

Response: §6-303 provides ability to waive technical and siting standards in two specific scenarios. The first described by §6-303(A) provides this waiver only for federal or state removal or remedial action plans. Both these federal and state remedial action plans are approved through a process that includes public participation, this waiver is not for operating solid waste facilities. Additionally, the waiver for these removal or remedial action plans can only be achieved if no adverse effect can be determined. For the example provided within the comment, a landfill that is operational would not be eligible for this waiver. This waiver provides the flexibility for remedial clean-up actions to occur when meeting the full requirements of these rules may impair the remedy itself or make it technically unfeasible. The second instance in which a waiver of technical or siting standards may be granted is defined by §6-303(B), which is when a specific variance has been granted. As outlined by these rules, this process would include public comment and a demonstration of need, public benefit and continued environmental and public health and safety protections. No changes have been made.

§ 6-304 Prohibitions

- 32) Item (1) may be item (a) by the numbering on the rest of the page.

Response: This formatting issue has been corrected in the clean-copy version of these draft rules.

- 33) (e); as presented and without a definition for commercial septage appears in conflict with permitted land application sites. Please consider the addition of “permitted” where appropriate for treated septage, etc. or define commercial septage.

Response: The Program agrees that without definition, this prohibition is unclear. To lend clarity a definition for domestic septage has been added and it reads:

“Domestic septage” means either liquid or solid material removed from a septic tank or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater, or a mixture of commercial or industrial and domestic wastes, portable toilet waste, holding tank waste, cesspool waste, waste from Type III marine sanitation devices, or grease removed from a grease trap..

- 34) My general comment is one of disappointment that the Secretary ANR still allows the burning of structures for the purpose of training firefighters. Having been a firefighter and as a town selectboard member, I am very much aware that the burning of structures in this day and age is unnecessary for the purposes of firefighter training and in fact disallowed under current health and safety standards as well as by insurers of municipalities and fire companies. Structures are now filled with artificial smoke for training. The only reason to burn a structure, most containing lead paint and other hazardous air contaminant sources when burned, is to provide an inexpensive, but environmentally unsound disposal alternative to landfilling a demolished structure. Burning such structures occurs without notice to neighbors and results in nearby residents (including elderly, women in their reproductive years and children) inhaling volatilized lead and other hazardous air contaminants, contaminants that contaminate nearby properties, organic farm fields and vegetable gardens. I worked on changing this policy in 2004 and we were close to eliminating it, but due to a single manager, such change was stopped. This, despite statements from fire department officials around the state supporting this change. Please consider working with your colleagues at the ANR Air Quality & Climate Division to see this unnecessary and unhealthy practice ended.

Response: The Solid Waste Program cannot prohibit an activity which is allowed by another Division within the DEC. The Air Pollution Control Division (APCD) would appreciate evidence from 2004 that there was considerable support from fire departments in making this change. APCD encourages fire departments to complete trainings at the Pittsford facility but most Departments state they don’t have the budget for it. APCD has also taken considerable actions over the past five years to limit the use of this program as a ‘cheap disposal’ option. This includes attending the structure burns personally, ensuring all Vermont Department of Health requirements have been met and pressuring the fire departments to find alternatives. This has led to a large

decrease in the frequency of this activity, with a higher level of responsibility involved. To remain consistent with the regulation by APCD, the Solid Waste management rules remain unchanged.

Subchapter 4 – Waste Management Plans

§ 6-402 Solid Waste Implementation Plans; General Requirements

- 35) The Striking of State Material Management Plan, to be replaced with Solid Waste Implementation Plans, based upon Municipal entities, strikes the heart out of The Declaration of Purpose, Section 6-102 which is retained: “These rules establish procedures and standards to protect public health and the environment by ensuring the safe, proper, and sustainable management of solid waste in Vermont.” The former State Material Management Plan states: Pursuant to VSA 10-6604 the Secretary shall publish and adopt a Waste Management Plan that sets forth a comprehensive statewide strategy for the management of solid waste.” This is worthy, should be highlighted, and retained. The fact that the Secretary and Agency has to our knowledge not published and adopted such a state-wide Waste Management Plan in recent years, makes it no less worthy: a goal meriting retention. The new Section 402, as proposed, makes no attempt to define a statewide waste management plan, but immediately substitutes Solid Waste Management Plans based upon municipal entities or an association of municipal entities without an overall or statewide guide. The result is disjointed, incremental, and void of statewide waste management goals and objectives, which would serve the overall public interest. Such reversal of roles reaches absurdity when in the case of Coventry, the power of a single municipality who sees itself benefiting economically (at the expense of its environment and municipal neighbors), allows former landfill staff and/or existing staff to write its required Statewide Municipal Implementation Plan (SWIP), thereby driving much of the State’s former role in plans for the State’s only permitted landfill. We recommend retention of language referring to a State Material Management Plan in Section 6-402, as well as retention of original language in the final two paragraphs of 6-402. *Example: A. Pursuant to 24 V.S.A. §2202a(c)(2), each regional planning commission is required to shall work cooperatively with municipalities within the region to prepare a solid waste implementation plan for adoption by all of the municipalities within the region which are not members of a solid waste district. The plan must conform to the state solid waste management plan and describe in detail how the region will achieve the priorities established by 10 V.S.A. §6604(a)(1). Each solid waste district is required to adopt a solid waste implementation plan that conforms to the State waste management plan, describes in detail how the district will achieve the priorities established in 10 V.S.A. §6604(a)(1), and is in conformance with any regional plan adopted pursuant to 24 V.S.A., chapter 117.*

Response: There is still an obligation for the state to publish and adopt a state material management plan through 10 VSA § 6604. The deletion of this language from the Solid Waste Management Rules does not impact that statutory requirement. The removal intended to clarify that statute guides the requirements that the Secretary must adopt while the Rules regulate other entities. The Rules provide the standards for these other entities (municipalities, solid waste management districts or alliances) to demonstrate conformance with the statewide management plan. The statewide material management plan was most recently adopted in November 2019 through the rule-making process. The solid waste management entities must get approval from the state by demonstrating conformance with that state plan, through the process described by these rules.

- 36) (a); “A municipality shall be a member of a district or alliance, or shall be an independent town, collectively these municipalities are referred to as Solid Waste Management Entities (SWME).” This sentence structure and the odd use of the term “shall” should be changed. I would suggest the following change to the first sentence to read as follows: “Municipalities participating as member towns to a solid waste management district or alliance, or acting as independent towns in the performance of their solid waste management responsibilities are referred to as Solid Waste Management Entities (SWME).”

Response: The program agrees that the sentence structure could use improvement but is retaining the use of the word 'shall'. The sentence now reads:

Municipalities shall participate as member towns to a solid waste management district or alliance or act as independent towns in performance of their solid waste management responsibilities. Collectively these municipalities are referred to as Solid Waste Management Entities (SWME).

- 37) (b)(2); typo: "describe siting **critierial...**" should read as "describe siting **criteria...**"

Response: This has been corrected.

- 38) (b)(4); typo: Should read as: "describe how proposed facilities will be reviewed for **inclusion** ~~including~~ within the SWIP"

Response: This has been corrected.

- 39) (b)(6); Revise as follows: "**Include** copies of any solid waste related ordinances ~~with the SWIP~~"

Response: This has been corrected.

- 40) (b)(7) ~~**demonstrate a demonstration of**~~ conformance with any applicable regional plan. ~~**Such**~~ a demonstration can be in the form of a letter from the applicable regional planning commission, copies of pertinent sections of the regional plan, or other documentation that **demonstrates** ~~**proves**~~ conformance.

Response: This has been corrected.

§ 6-403 Review of Solid Waste Implementation Plans

- 41) (a); the deletion of any reference to the role of regional planning commissions in the Secretary's evaluation of SWIP's is unconscionable. Likewise, and ironically, the Secretary's role is considerably weakened by the striking of her or his authority to "evaluate the (SWIP) plan for conformance with the State Solid Waste Management Plan." Retention of original language is requested.

Response: Regional planning commissions are not being excluded by the deletion of the language in this section. Rather, these rules are adopting the use of the term Solid Waste Management Entity (SWME), which includes municipal entities such as regional planning commissions. Similarly, conformance with the statewide material management plan (MMP) is still required by §6-403(b) and §6-403(c). The removal of the language in §6-403(a) was to provide separation and clarity regarding the two different requirements of when Solid Waste Implementation Plans need to be reviewed (section a) and how they will be reviewed (sections b and c).

- 42) (f), (g), and (h); should be retained, not annulled. For example:

- (f) *The Secretary shall approve the solid waste implementation plan of a municipality, solid waste alliance, or solid waste management district upon a determination that the plan conforms to the state solid waste management plan*
- (g) *In determining conformance of a submitted solid waste implementation plan with the State plan, the Secretary must find that all planning activities and items required by the State solid waste management plan have been adequately addressed or considered in the plan.*
- (h) *Prior to approving the solid waste implementation plan of a municipality, solid waste alliance, or solid waste district, the Secretary must also find that the public has had an appropriate opportunity to participate in the plan's development. This finding shall be based on a demonstration of early and continual efforts by the municipality or district to notify and involve interested and potentially affected members of the public in the decisions being contemplated through the*

planning process.

Response: The significant changes to these sections has been made to improve clarity regarding the process of Solid Waste Implementation Plan (SWIP) review. However, each of these items struck from this section have been incorporated into other requirements within appropriate sections (review, determination etc.). The demonstration of conformance with the statewide material management plan (MMP) (the former item (f)) is determined as part of the pre-approval process (§6-403(c)). The current MMP has revised planning activities (former item (g)) to be required performance standards to be reviewed as part of the demonstration of conformance (§6-403(c)). The requirement for facilitating public participation and review during the plan development (former item (h)) is now required per §6-403(d) but has been rewritten to reflect statutory requirements and performance standards of the MMP.

Subchapter 5 – General Application Submittal Requirements

§ 6-503 Certification Types

- 43) (a); End of line 2, “notices” should be “notice”

Response: This has been corrected.

- 44) (a)(4); Strike this entire sentence. Provisional certifications can no longer be issued under the current chapter of law. This provision should be removed in the next rewrite of Chapter 159 as it only applies to unlined landfills that were operational January 1, 1990 and all such certified facilities were required to cease operations on July 1, 1992. In point of fact, this law was written to allow the Brattleboro landfill to get recertified despite its groundwater pollution issues until the Windham SW District could get its lined landfill build, which as we know now, was never built.

Response: This is correct and the reference to provisional certification has been struck.

- 45) (c)(2); Change first word to either “Organic Materials” or “Organics”, depending on what you decide to do with the “Organics” definition as discussed above.

Response: Agreed. §6-503(c)(2) now reads:

~~Organic~~ Food residual drop-off facility registration under § 6-1202(a);

§ 6-504 Full Certification Application; Interim Certification Submissions

- 46) (e)(12); The section on the Operator training plan appears to be combined with previous section on fee considerations.

Response: This has been corrected.

- 47) (e)(22); amend to include “adjoining **residents**” as previously discussed.

Response: See response to comment #2.

- 48) (e)(24); Please reconsider this stripping of public notice to town selectboards (legislative body), residents and landowners. Shrink the radius if need be, but cutting out towns and facility neighbors to facility public notices is really bad public policy, particularly when it involves large facilities with considerable community impacts such as large transfer stations, landfills and materials recovery facilities.

Response: The Rules as drafted do still require public notice of applications to towns and adjoining landowners for full certifications.

The language within § 6-504(e)(24) is proposed for removal but has been replaced with the public notice requirements of 10 V.S.A. Chapter 170: Department of Environmental Conservation; Standard Procedures, adopted in 2015. 10 V.S.A. Chapter 170 adopted a standard public notice process for all of the department, and these proposed revisions formally incorporates these requirements into the Solid Waste Management Rules.

Under this revised process, adjoining landowners are notified (§6-504(e)(22)) at the point of an application being submitted with directions on how to access the Departments digital Environmental Notice Bulletin (ENB). All subsequent noticing requirements (to town officials and subscribers to the notice system), including posting of documents then occurs by the Program through the ENB platform, the requirement to submit the notice as part of an application is no longer applicable. No changes have been made.

- 49) (f)(2)(G); please amend as follows: “An affidavit providing the names of adjoining **residents and** landowners...”

Response: See response to comment #2.

- 50) (g); please amend as follows: “Upon (prior or concurrently with) submission of an application to the Secretary, the applicant shall provide written notice of the application to all adjoining **residents and** property owners.”

Response: See response to comment #2.

- 51) (e)23; While the Secretary does and should have broad authority for the ultimate approval of the applications for solid waste management facilities, the requirement that the application needs to include “any other information that the Secretary may require” is not appropriate, given legal, proprietary, and appropriateness considerations. Please consider the deletion of this language.

Response: This submittal requirement has been amended to better reflect that any additional information requested by the Secretary would have to be necessary in order to make a determination regarding protection of the environment, or public health and safety. This does place some constraints on what the Secretary is able to request as part of an application process, while retaining the Secretary’s ability to obtain necessary information. This requirement now reads:

Any other information that the Secretary may require as deemed necessary to protect human health, safety, and the environment.

- 52) (f), original Application for Interim Certification, we note, is written more clearly, economically, and effectively in protecting the public interest than the language for Full Certification. Example: (14)- (20)

(14) A closure plan that satisfies the applicable criteria of § 6-907; § 6-1007, § 6-1111, § 6-1208 or § 6-1309 of these Rules, as required for the facility type. The closure plans must include, at least:

(A) A description of the steps necessary to close the facility;

(B) A listing of labor, materials, and testing necessary to close the facility;

(C) An estimate of the expected year of closure;

(15) A schedule for final closure including, at a minimum, the total time required to close the facility and the time required for the various steps or phases in the closure process;

(16) A cost estimate for facility closure that satisfies the requirements of § 6-1004;

(17) A description of the methods for compliance with the closure requirements; and

(18) Any remedial action necessary prior to closure, if required by the Secretary pursuant to § 6-311.

(19) A post-closure plan that satisfies the criteria of § 6-1008 of these Rules.

(20) A closure and post-closure plan along with cost estimates, unless the application is exempt as described in Subchapter 10. and

(24) A plan for effective public notice of the application. Such a plan shall include:

- i. Provisions for a notice to the general public by advertisement in at least two newspapers of general circulation in the area of the proposed facility. One shall be a regional weekly paper when available.
- ii. A listing of the names and mailing addresses of persons and entities that the applicant is required to notice as follows:
 - (i) The legislative body
 - (ii) All facilities except those specified in subsection (h)(1)(B)(ii), (iii) and (iv) of this section, all residences and landowners within one-half mile radius of the property boundary of the facility or the nearest 100 residences and landowners, whichever is the lesser number;
 - (iii) Diffuse disposal facilities, all residences and landowners within 500 feet of the proposed diffuse disposal area, and to all adjoining residences and landowners;
 - (iv) For sludge and septage storage and treatment facilities which are located at a wastewater treatment plant, except for those facilities treating the material to achieve PFRP (Process to Further Reduce Pathogens), all adjoining residences and landowners within 1000 feet of the facility; and
 - (v) For all facilities, except diffuse disposal facilities, whose applications are determined to be minor by the Secretary, all adjoining residence and landowners.
 - (vi) State agency or subdivision
 - (vii) Regional planning commission

Response: The rules for interim certifications are from statute 10 V.S.A. 6605b, the Program disagrees that interim certifications are more effective in protecting the public interest than a full certification, and that each of these items, as appropriate, is required within the application for a full certification. No changes have been made.

§ 6-505 Minor Application Submissions

- 53) (a)(2)(J); The letter from the solid waste management entity should only be necessary for the construction of a new facility, not a change in the operations. Consider limiting this requirement to only new solid waste management facilities.

Response: Per V.S.A. 6605 (c): *The Secretary shall not issue a certification for a new facility or renewal for an existing facility, except for a sludge or septage land application project, unless it is included in an implementation plan adopted pursuant to 24 V.S.A. § 2202a, for the area in which the facility is located.*

As an example, if a permitted facility makes a substantive change in operations, say from a transfer station to a compost operation and the local solid waste entity requires that facility to be re-included in their SWIP, the Secretary would require the submission of a letter to document this conformance. This submittal requirement will be retained.

- 54) (a)(2)(N); While the Secretary does and should have broad authority for the ultimate approval of the applications for solid waste management facilities, the requirement that the application needs to include “any other information that the Secretary may require” is not appropriate, given legal, proprietary, and appropriateness considerations. Please consider the deletion of this language.

Response: The intent of this requirement is to allow the Secretary to obtain additional information necessary to make a determination regarding protection of the environment, or public health and safety. This does place some constraints on what the Secretary is able to request as part of an application process, while retaining the Secretary’s ability to obtain necessary information as part of the review process. (a)(2)(N) is being removed from the Rule, because this requirement is duplicative of (a)(2)(M), which reflects this ability to obtain additional, but relevant information.

§ 6-507 Application for Variance from Solid Waste Rules

- 55) (c)(3) Variances; Please list explicit public benefits and public costs of a waste facility and examples of how they are quantified. Cost Benefit analysis without quantification lacks merit. Moreover, effective cost benefit analysis requires quantitative comparison between alternative investments. Variance approval should be justified.

Response: The Program agrees that, in some cases, a public cost benefit analysis would be appropriate for the consideration of a variance issuance. However, the Program disagrees that such a request should be prescribed by Rule. Rather, if an applicant does not provide this information independently in the preparation of the application, the Secretary could request it during the review of the application and explicitly state what would be required at that point. The situation could exist whereas the variance request will be denied, and a cost benefit analysis would have no impact on that determination. If a particular type of variance were to become more commonly requested, or questions regarding variance documentation were to be frequent, the Program would have the ability to develop a policy outlining the particular components that should be included within a cost benefit analysis and when a cost benefit analysis would be required. A policy would provide the appropriate level of guidance for applicants, while maintaining the potential for a broad range of variance application types that may occur per the Rule.

- 56) (c)(5); Information demonstrating that the grant of a variance will not enable the applicant to generate, transport, treat, store or dispose of hazardous waste in a manner less stringent than that required by the provisions of Subtitle C of the Resource Conservation and Recovery Act of 1972, as amended, and the regulations promulgated under that Act; *Please explain the relevance in 2020 of evaluating a variance request for less stringency to The RCRA of 1972. This 48-year-old standard, in an age of PFAS contamination (never mentioned in rules), we have to believe are the words of the waste industry. It is a “gimme”. A higher, more relevant standard or standards should be substituted.*

Response: The Resource Conservation and Recovery Act was signed into law on October 21, 1976, and has been amended three times, as needed, in 1984, 1992, and 1996. The variance requires that the applicant demonstrate that the proposed activity will NOT be less stringent than these RCRA requirements, which sets the minimum bar that an applicant must achieve. The updated standards that applicants must achieve are established by state Rule. In applying for a variance an applicant must specify and justify their request for variation from these updated standards established in Rule. This requirement only establishes the minimum federal standards that an applicant must attain and may not obtain a variance from, it does not prescribe the only standards that must be achieved.

- 57) (d); please amend as follows: “The applicant shall provide notice of application to all adjoining **residents and** property owners through the U.S. mail...”

Response: See response to comment #2.

Subchapter 6 – Application Review and Certification Issuance

§ 6-601 Full Certification (Type 2) Review Process

- 58) (a); Please consider removing “by the” within § 6-601(a).

Response: This has been corrected.

- 59) (b)(1); Please consider removing “The applicant shall provide this notice by U.S. Mail.” within § 6-601(b)(1). This reference appears to be repetitive.

Response: This has been corrected and now reads:

The applicant shall provide notice, through the U.S. Mail, to adjoining property owners on a form developed by the Secretary. The notice shall be provided at the same time that the application is submitted to the Secretary, and

the applicant shall provide a signed certification to the Secretary that all adjoining property owners have been notified in accordance with this requirement.

- 60) (b)(3); Please consider adding “within 1 week” immediately after the word “writing” within the first sentence of § 6-601(b)(3). This would provide applicants courtesy notice to promptly address incompleteness.

Response: The Program agrees that there should be a timeline for the administrative review process. However, given the time associated with processing an application following its receipt, this notification requirement has been amended to provide notice to applicants of administrative completeness within 15 days. This now reads:

(3) If the Secretary determines that the application is not administratively complete, the Secretary shall notify the applicant in writing of such a decision. This notification shall be completed within 15 days of receipt of the application and shall identify each deficiency in the application that resulted in the Secretary’s decision.

- 61) (c); Please consider replacing “any person” with “50 or more people having signed a petition”.

Response: 10 V.S.A. Chapter 170 adopted a standard procedure for the public notice process and the requirement for the Secretary to hold a public meeting whenever any person files a written request is established by that statute. The Solid Waste Management Rules cannot be less stringent than the statute and so no changes have been made.

- 62) (c); Please consider replacing “shall” with “may” and consider ending the sentence after “meeting” and remove “within 14 days of the notice to the ENB.” A signed petition has more justification and reduces the risk of a single person not having technical standing stopping or significantly slowing down a necessary permitting process. As written, a single person not located within the state of Vermont could require the implementation of the public informational meeting. We further edited to include giving the Secretary some discretion on public hearing merit/need. If a hearing were to occur, the notice period is addressed elsewhere.

Response: See response to comment 61.

§ 6-602 Minor Certification (Type 4) Review Process

- 63) (e); –typo – amend as follows: “Additional notice. At any time during the review of an application, the Secretary may require that a permit **application** being reviewed under the procedures....”

Response: This has been corrected.

§ 6-605 Variance Review Process

- 64) Please consider adding “and may be combined within an otherwise full certification process”. This would allow applicants to provide a full certification application with one submittal and possibly lessen review time along with allowing the permitting process to be as efficient as possible considering Secretary resources as well as the resources of applicants.

Response: By retaining the variance application process as a separate process that occurs prior to submission of the facility application, the Program is preventing unnecessary preparation by applications and review by the Program of components of a facility design or operation that are not relevant to the rule for which the variance is being requested. If a variance is determined to be appropriate then the preparation of the full application would be appropriate, but if the variance were determined to be unable to be issued, then the current process would prevent the use of applicant resources for preparation of materials that do not need to be reviewed.

§6-606 Suspension and Revocation of Certifications and Registrations

- 65) (a); There may be situations where the Secretary would not want to, or it may be inappropriate to, revoke a facility certification or registration in its entirety. For instance, if there was a rogue landfill operator and it became necessary to pursue the revocation of the facility's operational authority, but not the other certification requirements such as closure requirements, leachate management requirements, capping requirements, financial responsibility requirements, etc. As such, it would be important to include language that provided for revocation of certain certification or registration provisions with revoking the entire authorization. To that end, I would suggest that 6-606(a) be revised as follows: " Authority. The Secretary may suspend or revoke, in whole or in part, a certification or registration issued under this subchapter ..."

Response: Agreed, §6-606(a) now reads:

Authority. The Secretary may suspend or revoke, in whole or in part, a certification or registration issued under this subchapter...

- 66) (a); Please consider removing "or upon receipt of a written petition for suspension or revocation." from § 6-606(a). A "written petition" is not well defined. The operation of solid waste facility could easily be forced to cease operating based on allegations submitted in the form of a petition from an activist group. This rule gives far too much authority to individuals, groups or other organizations that do not possess a technical or scientific background. Suspension or Revocation of a Solid Waste Operating Certification should only originate from the Secretary. Please consider removing § 6-606(b) entirely for the reasons stated above.

Response: §6-606(c) provides the basis for suspension or revocation decision and it would be a determination that of any of those identified criteria were applicable that would drive the Secretary's determination, which would include review of technical information by Agency staff. Defining the requirements of a petition for suspension and revocation is limiting, as the Secretary would consider any communications from the public or interested parties in making a determination as to whether there were a basis for suspension or revocation of a facility certification. The inclusion of a petition process for making a determination regarding suspension or revocation is not common in Department Rules and is not a necessary component for the Secretary to make this determination. The requirements for a written petition and reference to the petition process have been removed from these Rules.

- 67) (g); Party Status; We recommend the following sentence be added: *"In addition to persons whose property is affected, any municipality, county, regional commission or incorporated environmental, health, or educational entity located within the watershed, within or without of Vermont, shall be considered to have party status."* We recognize this expands the typical definition of party status beyond that of affected property owners. However, in the case of a landfill having regional, if not statewide, consequences to air, water, roads, and communities, we feel it important that an Agency representing the broad public interest, works to expand rights to participate in cases of public hearings and/or appeal. If legal precedent causes pause, err on the side of the broader public's right to participate, with the Courts sorting out differences if necessary.

Response: The rule, as written, allows the Secretary to determine party status for any person, which includes entity groups, who is or whose property is directly affected by the facility that the Secretary is holding the hearing for consideration of suspension or revocation. Party status determined by this condition would only be for the participation in a hearing, the Secretary has provided a notice of suspension or revocation. At this point in the process the Secretary has already made determination that there is an actual or imminent and substantial threat of harm to the public health, public safety, or to the environment. Such a determination would also frame the Secretary's understanding of who is impacted by the facility and therefore would guide the determinations regarding party status. No changes to rule have been made as the language, as written, is inclusive of all entities identified within the comment.

Subchapter 7 – General Siting, Design, and Operating Standards

§ 6-702 Prohibited Areas

- 68) (a); After the clause “Facilities are prohibited from being sited”, add words “*or expanded or permit times extended*” in the following designated areas: We agree strongly in the enumeration of designated areas in which a landfill cannot be sited. In cases where a landfill is already sited in a prohibited area, or multiple-prohibited areas, such as the Casella Coventry landfill, due to grandfathering-in, or past failure to evaluate for siting, such incumbency shall not be used to justify additional expansion or extension of existing permit times, in such designated prohibition areas. We request insertion of language to capture this objective.

Response: A facility that does not meet the requirements of Rules that are in place at the time of application would not be approved for construction or operation without obtaining a variance through that established process. These Rules do require review of siting requirements for facility expansions; however, this is done with consideration of any previously issued variances for that facility.

- 69) (a)(2-4); In addition, we object strongly to the respective “escape” clauses beginning with the words, “unless allowed ...” Such clauses in the three prohibited subsections should be removed. Likewise, we object strongly to the identical “escape” sentences in Sections 6-701 (a), (8), (9), and (11). Beginning with the words, “This criteria does not apply....” It is ludicrous to sanction expansion, or extension of existing permit times, beyond permits already given in prohibited zones, on the basis of irrelevant legalese “beyond the previously certified waste management boundary.” An historical property survey boundary does not an ecological zone or boundary make. Such irrelevant rationale appears to guarantee future permit approval to an incumbent waste operator who happens to own extensive acreage when that incumbent operator later applies for an expansion of landfill acreage and/or permit time extension. An historical survey property boundary normally has nothing to do with ecological differences and limitations for waste disposal and storage.

Response: Implementation of the Vermont Wetland Rules serves to identify and protect wetlands along with the functions and values they provide. Review under these Rules serves to determine whether a proposed project can or cannot proceed given anticipated impacts to wetlands. If such a determination has not or cannot be made, the facility would continue to be prohibited by these Rules in order to provide protection of these systems. However, if such a determination can be made and a Wetlands Permit or Conditional Use Determination has been issued, the protections will be provided.

The language regarding the limitation on previously certified facilities that are not expanding being exempt from the siting prohibitions for floodways, river corridors or Outstanding Resource waters only applies to storage, transfer or recycling facilities, it does not apply to disposal facilities.

§ 6-703 Siting Standards

- 70) (a); Please consider removing § 6-703(a) entirely. As explicitly referenced in (a), § 6-703(b) provides an adequate scientific standard for facility siting. Section (a) is far too ambiguous and may allow a person or group with unsubstantiated health and safety concerns to undermine an otherwise practical and reasonable process.

Response: As written, §6-703(a) is made up of two categories of factors to determine compliance – the facility must meet the conditions of (b) but also must “be located such that an emission or discharge from the facility will not unduly harm the public health and safety”. This allows for two independent determinations under (a). Relying solely on conditions in (b) would eliminate the ability to determine compliance under a more general “public health and safety” standard. No changes have been made.

- 71) Table A; Consider the following edit: Minimum distance from waste management boundary to drinking water source ~~not owned by the applicant~~.

Response: A solid waste facility may have a drinking water source on their property and they control whether it's used as potable or not and so take on that liability. The language will be retained, no changes have been made.

- 72) Table A; Consistent with changes further down in the draft rule, amend the last Category in the first column to read: "Minimum distance from waste management boundary to residences, schools, daycare facilities, hospitals, and nursing homes, ~~not owned by the applicant~~."

Response: This has been corrected

- 73) Table A; Footnote 1; typo on first line near end, should read as: "...non-EQ biosolids, and stabilized domestic septage..."

Response: This has been corrected

- 74) Table A; note your replacement of your "discrete disposal facility" term with landfill in Footnotes 2,3 & 8 (the addition of landfill in Footnotes 5 & 8 need to be underlined by the way), again without a definition upfront.

Response: See response to comment #10, a definition of landfill has been provided. The use of the term landfill within footnotes 5 and 8 is established in the 2012 version of the Solid Waste Management Rules and as such has not been identified as new language within this rule revision. No additional changes necessary.

§ 6-704 Site Characterization and Facility Design

- 75) (a); Please consider removing "General" and replace "design" with "operation" within the first sentence of § 6-704(a).

Response: The section titles are intended to provide clarity for the user of these rules as to which facilities and activities each section of the rule applies. The identification of these being general operating standards for all activities will remain. Although this section is explicitly addressing design considerations, the Secretary agrees that Facility Management Plans address both operation and design, and as such this sentence has been amended to address the comment, and provide clarification, to read:

General. The basis of design and operational plans for all facility components shall be addressed in a facility management plan (FMP.)

- 76) (c); We believe a (C) needs to be added prior to "Any other information relevant to proper operation of the facility.

Response: Agreed, this has been corrected.

- 77) (f); Please consider revising the two typographical errors in § 6-704(f).

Response: These have been corrected.

- 78) (g); Please consider adding "surface grade," after "hydrogeology", and adding "potential for" prior to "air pollution" and removing "control and" in § 6-704(g).

Response: Agreed, these have been corrected.

§ 6-705 Operational Standards

- 79) (a); Please consider removing "Applicability" from § 6-705(a).

Response: For rule consistency, the title of applicability will remain, no changes have been made.

- 80) (b); Please consider removing “Operational standards; general.” from § 6-705(b). In addition, consider removing “ensure that activities conducted as a facility comply at all times with” with “operate the facility to”. It is not practical or reasonable to describe operations as absolute.

Response: The section titles are intended to provide clarity for the user of these rules as to which facilities and activities each section of the rule applies. The identification of these being general operating standards for all activities will remain. The Secretary disagrees that the conditions within this requirement are unattainable or impractical to achieve. These conditions require the maintenance of standard operating conditions, such as maintaining trained staff, adhering to the Solid Waste Management Rules and implementing facility operation plans, as appropriate, practicable actions are identified within these conditions. No changes are being made to this requirement, however, for sentence clarity and to reduce redundancy, the sentence has been amended to read:

(b) Operational standards; general. Each owner and operator shall ensure that activities conducted ~~as~~ at a facility comply ~~at all times~~ with the following standards, as applicable to the facility type.

- 81) Please consider removing “Clearly” and “and easily read” in the first sentence of § 6-705(b)(7). We believe “Visible” covers the requirement and lessons interpretation of the requirement.

Response: No changes have been made, the existing language clearly defines the Secretary’s expectations regarding signage.

- 82) (b) (2); Operational Standards. This subsection appears to have been stricken without replacement. Please explain and correct if a replacement sentence is found elsewhere. We request retention of this original sentence, together with addition of a second sentence: “A qualified third-party Clerk of the Works, paid for by ANR, will be hired for on-site monitoring and review of the entire new or expanded landfill construction process with weekly reports filed to the Solid Waste Division, ANR.”

Response: This subchapter was intended to provide the minimum operating conditions for all solid waste facilities. The requirement for a professional engineer certification was not appropriate for all facilities types, and as such this requirement for landfills facilities was moved to §6-1005 (c)(1). The Secretary disagrees with the additional language requested by the comment. The Secretary relies on the professional accreditation program. The presence of a professional engineer onsite during construction and their completion of all quality assurance and quality control documents provides sufficient assurance in addition to Program staff presence onsite, participation in construction meetings and review of documents.

§ 6-706 Reporting

- 83) (c); The striking of the word “emission” in the original document leaves open the possibility that a gaseous emission may go unreported. The word “discharge” may more likely refer to a leachate breakout. There is no harm in making this distinction between gaseous emissions and liquid discharges.

Response: The definition of discharge includes air emissions, no changes have been made.

- 84) (c)(2)(A); Report of Discharge; Please specify a 24-hour phone number or web portal reporting requirements. Differing ANR DEC reporting requirements may be in conflict with reporting criteria presented here.

Response: Agreed, the spill response number has been added to this Rule and this section now reads:

.....reported within 24 hours to the State of Vermont Waste Management & Prevention Division at (802) 828-1138, Monday through Friday, 7:45 a.m. to 4:30 p.m. or the Department of Public Safety, Emergency Management Division at (800) 641-5005, 24 hours/day. Additional notification shall be made to the local health officer, and appropriate emergency response authorities of the affected municipality(ies).

- 85) (c) (2) (B); Similarly, the striking of the word “spill” may allow for such an event to go unreported, as in the spill of thousands of gallons of leachate being transported to Montpelier WWTF for disposal in 2019. We urge that the word “spill” be retained.

Response: The definition of discharge includes spills, no changes have been made.

§ 6-707 Record Keeping

- 86) (b)(2); The requirement for landfills to maintain all records until the completion of post-closure care is not practicable. Consider modifying the recordkeeping requirement to ten years.

Response: Historic documents are particularly important during the post-closure care period. Changes in land use, identified problems with cap materials and other scenarios regularly require review of historic documents that are in exceedance of 10 years in age. Given digital storage capacities for archiving and accessing documents, it is not an undue burden to maintain these records throughout the post-closure care period.

§ 6-708 Corrective Action

- 87) (a) and (a) (2); As above, inclusion of the words “emission” and “spill” would ensure a comprehensive corrective action plan in any situation.

Response: See responses to comments 82 and 83 above. The definition of discharge is inclusive of both any emissions and spills, no changes have been made.

- 88) (a) (5); We request this language be reinstated in the unfortunate event that a hazardous emission, discharge or spill should occur so egregious in nature that cessation of operations, certification suspension or revocation proceedings may be required to protect the health and safety of the public and environment.

Response: This language was retained within rule and moved to §6-708(e). This language move was made to clarify that items within §6-708(a) were actions a facility owner/operator is required to take, while §6-708(e), now containing the language of concern for this comment, defines actions that will occur if the Secretary makes a determination that cessation is required.

Subchapter 8 – Financial Responsibility, Capability and Estimates

§ 6-802 Financial Responsibility

- 89) (e); The rule allowing the Secretary to obtain exclusive access to financial assurance mechanisms without consent for even a partial failure of closure / post-closure requirements is overbroad and not language that financial institutions would agree to. Section (g) already allows the financial assurance to be drawn for closure or post-closure. Consider deleting section (e).

Response: The language within Rule is consistent with the financial assurance provisions in RCRA and is substantially identical to a financial assurance mechanism within other states solid waste management rules. Owner/operators are able to obtain financial assurance mechanisms that comply with this requirement and this does not represent an undue burden. No changes have been made.

- 90) (e); The requirement to maintain a full 30 years of post-closure financial assurance during the entire post-closure period is not reasonable. Understanding the concern that post-closure period could be longer than 30 years, please consider replacing this requirement with an ability for the facility to prepare and submit a revised post-closure estimate and demonstration on an annual basis. As the annual demonstration shows progress in meeting the criteria in 6-1009, the level of post-closure financial assurance could be reduced or maintained as appropriate.

Response: The Program essentially agrees, and this is reflected within the Rule language. The 30 years of funding can be reduced, as appropriate, and based off of the submittal and approval of revised post-closure plans. Any reduction in the post-closure activities will be reflected as a reduction in the post-closure funding. These reductions will be justified by the performance of the facility. The Program will require the maintenance of 30 years of the annual amount at all times until custodial care can be achieved.

§ 6-805 Post-Closure Cost Estimate

- 91) (d); Please consider adding the word “final” immediately prior to “capping system” in the first sentence. This makes it clear which capping system is referenced relative to the 30-year post closure period start.

Response: Agreed, this addition has been made. The requirement now reads:

For the purposes of post-closure cost estimates, the post-closure period for landfills shall be at least 30-years from the date that installation of the final capping system is completed, or the date of the last most recent estimate submitted.

§ 6-806 Revision to Closure and Post Closure Cost Estimates

- 92) Recent data on the toxicity of landfill leachate, including PFAS and other CECs, suggest that the leachate will continue to be produced for many decades into the future even after the facility is closed, requiring collection, (adequate treatment technology) and disposal that does not threaten the public health and safety of that of the environment, how will this be ensured in the language of these Rules?

Response: §6-806(b) covers adjustments to the post closure estimate based on changes to the facility post closure plan. Additional sampling and ongoing monitoring requirements, would be reflected in updates to the post-closure plan and post-closure cost estimates, including instances where the Secretary requires consideration of new contaminants of emerging concern.

Subchapter 9 – Storage, Transfer, Recycling and Treatment Facilities

§ 6-904 Storage, Transfer, Recycling and Processing Facilities

- 93) (a)(1); Please consider the typo or omission in § 6-904(a)(1) after the first comma.

Response: This typo has been corrected.

- 94) (i); Again, recommend changing “Organics” to “Organic Materials” Recovery Facilities

Response: See the response to comment 20, organics has been converted to organic solid waste.

§ 6-905 Storage, Transfer, Recycling and Processing Facilities Operating Standards

- 95) (c)(1); The phrase “practicable steps” needs to be defined. At a minimum, reference must be made to a requirement of a statistically significant number of inspections, -announced and unannounced- to be made weekly of incoming truck container loads of solid waste. This “practicable step” is woefully inadequate and unenforced presently.

Response: The phrase “practicable” steps is acceptable. The facility is subject to enforcement actions if found not to be operating consistent with the Rules. Storage, Transfer, Recycling and Processing facilities are intimate type facilities with a lot of direct contact between the employees and the materials they are accepting. Additional statistical sampling is not necessary to be placed into the rules.

- 96) (c)(1); The current “practicable” step of one inspection per week of incoming truckloads of waste is woefully inadequate, given the approximate 500 truckloads per week entering the landfill now. We request higher standards be set to ensure source separation (and elimination) of highest polluting waste materials occurs (e.g. sheetrock-odors; carpeting/upholstered furniture/PFAS).

Response: This rule is addressing the Storage, Transfer, Recycling and Processing facilities and the active management of waste to prevent hazardous waste or landfill banned wastes from being included within the disposal waste stream is adequate. The components of an individual facilities operations that would fulfill the requirements of this rule would be described within the facilities Facility Management Plan (FMP) and would be dependent on the size and type of operations of that facility. The comment appears to be a comment for landfills would similarly be addressed in an individual facility management plan (required by 6-1006(b)(8)) rather than rule, as inspections will depend on facility type and operations. No changes have been made.

- 97) (c) (2); This is a general feel-good aspirational statement, not based in reality of landfill leachate leakage exceedances in groundwater, including PFAS; storm-water run-off violations; and air quality violations, (odors leaving premises, and methane emissions un-captured.) If you are honest, enforce this statement; if not, delete it.

Response: These rules are addressing Storage, Transfer, Recycling and Processing facilities and is pertaining to preventing odors, litter, and animal scavenging on site and is enforced for these facilities. This citation does not apply to disposal facilities.

- 98) (c)(4); Recommend changing “Organics” to “Organic Materials”.

Response: See the response to comment 20. organics has been converted to organic solid waste.

- 99) (d)(1); rewrite as follows; “Except as specifically provided within this section, all solid waste shall be processed under a roof during routine operations or stored in containers when stored outside the processing/transfer building to prevent discharge of contaminants and reduce the risk of odors, litter release and building fires.” We interpreted this condition to specifically target waste storage on site after normal operating hours and adjusted accordingly based on our experience.

Response: The Program agrees with the intent of the proposed changes, but has amended the proposed changes to decouple storage (d)(1) from operational processes (new language (d)(2)) and to address both large and small facility operations. These conditions now read:

(d) Solid Waste; additional standards.

(1) Except as specifically provided in this section, all solid waste shall be stored in containers, except during active management. The facility and storage containers shall be managed to prevent a discharge of contaminants from the containers.

(2) All materials removed from containers for management during routine operations shall be managed under a roof and in a defined operational area to prevent a discharge of contaminants.

- 100) (e)(1); Please consider removing adding the words “or other” with “under” and remove the word “box” within § 6-905(e)(1).

Response: Agreed, this has been changed to read:

Materials to be recycled, contaminated recyclable materials, and process residue which may be dispersed by wind shall be stored inside buildings, under roofed structures, in enclosed trailers, or in other closed containers which are covered except when the facility is operating.

101) There appears to be a typo or omission within § 6-905(g)(1).

Response: This has been corrected.

102) (m)(1); typo, should read as: “Untreated wood, concrete, bricks, mortar, or asphalt, ~~scrap metals~~, **and** appliances ~~and furniture~~ are exempt from the containerization requirements of §6-905(d)(1) and may be stored uncovered at the facility.”

Response: These typos have been corrected.

§ 6-906 Storage, Treatment, Recycling, and Processing Facilities Applications

103) There appears to be a typo or omission within § 6-906(b).

Response: This typo has been corrected.

104) VAAFM requests that a provision be included in this section, in addition to the FMP requirement, that would require Organic Recovery Facilities (ORFs) meeting the definition of a farm under the RAP definition, to indicate adequate storage capability either through a NRCS 590 Nutrient Management Plan (where applicable) and/or an associated VAAFM issued permit or certification prior to material being transported to the respective facility.

Response: ORFs typically process solid waste and transport to another location. Nutrient management uniquely applies to digesters that land apply digestate. All permitted solid waste anaerobic digesters will need to address the management and storage of liquid and solid digestate at the time of application. The commenters concern is sufficiently covered in Subchapter 12. No changes proposed.

Subchapter 10 –Disposal Facilities

§ 6-1001 Applicability

105) There appears to be a typo or omission within § 6-1001(b)

Response: This typo has been corrected.

§ 6-1003 Additional Disposal Facility Siting Prohibitions

106) Please consider removing § 6-1003(a)(3)(E) entirely. This is not a reasonable standard for any solid waste facility in Vermont and cannot be achieved.

Response: The Program does not agree and although it is a difficult standard to achieve it is the goal of these Rules to prevent off-site emissions.

§ 6-1004 Additional Disposal Facility Design Standards

107) (a); Please consider removing “so as to preclude hazards to the public health and safety, reduce impacts on the environment and reduce the likelihood of nuisance conditions.” within § 6-1004(a). The second half of this

standard can be interpreted in multiple ways and does not align with a reasonable standard. The first section of the sentence covers the standard and enforcement needs only to focus on “reliable” as an action definition. There appears to be a typo or an omission in the first line of the sentence.

Response: The language proposed for removal by this comment provides the goal of the design standard. As this is a design rather than an operational standard, retaining the language on the goal of the design is appropriate. No changes have been made.

- 108) (c); Please also consider removing “to surface water, groundwater, or the air.” within § 6-1004(c). The second half of this description is unnecessarily repetitive to the first half of the sentence.

Response: Agreed, § 1004(c) has been changed to read:

Facilities shall be designed to protect surface water, groundwater and the air, by detecting through monitoring where appropriate, the emission or discharge of contaminants from the facility.

- 109) (h); Please also consider removing “and appropriate provisions for leachate treatment. The secretary may waive the liner, leachate collection system and leachate treatment requirements for landfills or portions of landfills that are designated solely to receive particular waste components that are designated by the Secretary as not a potential source of leachate that is harmful to public health and safety or the environment or capable of the creation of nuisance conditions. Landfills accepting municipal solid waste shall not be granted a liner waiver.” within § 6-1004(h). The second half of the first sentence is vague and provides no clarity on “provision” within § 6-1004(h). Please consider either removing this requirement or better define it. Please consider adding “and” between the words “leachate that” and adding the word “not” between “is harmful” and adding “are not” between the words “or capable” within the second sentence within § 6-1004(h).

Response: Appropriate provisions for leachate treatment, will indeed depend on the landfill type, waste materials managed and the landfill design, as such it is not prescribed within these rules but Provisions refers to a plan for the collected leachate, be that an agreement with a wastewater treatment plant or multiple plants or on-site treatment. The second sentence will read:

The Secretary may waive the liner, gas collection requirements, leachate collection system and leachate treatment requirements for landfills or portions of landfills that are designated solely to receive particular waste components that are designated by the Secretary as not a potential source of leachate or landfill gas and that is not harmful to public health and safety or the environment or are not capable of the creation of nuisance conditions.

- 110) Please also consider removing § 6-1004(d) in its entirety. With the development of an expansion area covering (potentially) many acres that could create a reducing condition and potentially impact existing monitoring or remediation systems. That expansion would otherwise be robust, constructed and operated appropriately and not have a direct contribution on an existing monitoring/remediation system. Any impact may also not create an exceedance of a groundwater standard yet could increase certain conditions in particular to those naturally occurring metals such as Iron, Manganese and Arsenic that we see in the soils and groundwater around the NEWSVT landfill. Certainly, we agree with independent monitoring to the greatest extent practical and agree with a modeling (or other) planning tool.

Response: The Secretary cannot permit activities that will result in an exceedance of the groundwater enforcement standards at points of compliance (Groundwater Protection Rules and Strategy §12-604). This permitting prohibition does not consider the presence or absence of existing contamination, while the provisions of §6-1004(d) does allow the Program to assess potential impact. The creation of reducing conditions, due to the presence of a permitted activity, does have the potential to adversely affect public trust uses by causing exceedances of regulated compounds for which there is a groundwater enforcement standard, such as manganese and arsenic. In considering an expansion, the potential impact to groundwater must be considered both independently and in conjunction with any existing contamination. The Groundwater Protection Rule and

Strategy does recognize the presence of naturally occurring contaminants within Vermont's unimpacted groundwater. It is allowable for background concentrations of naturally occurring contaminants to be determined and defined for individual facilities. This would allow a facility to demonstrate whether the impact of a facility was contributing to increases in these naturally occurring contaminants or if the exceedances were due solely to the natural occurrence and unrelated to facility operations or presence. No changes have been made.

- 111) (h)(1); Replace phrase "may be approved" with phrase "must be prohibited". There is no justification for approving landfill expansion while pollution violations to groundwater exist; and until they are mitigated and eliminated.

Response: The Secretary cannot permit activities that will result in an exceedance of the groundwater enforcement standards at points of compliance (Groundwater Protection Rules and Strategy §12-604). This permitting prohibition does not consider the presence or absence of existing contamination, while the provisions of §6-1004(d) does allow the Program to assess potential impact and permit an activity that will not worsen the existing contamination or remediation. No changes have been made.

- 112) (h)(2- 4); These conditions are unnecessary and should be removed when the above language change occurs.

Response: As (h)(1) has not been amended, per Comment 110, these items will remain.

- 113) (i)(3)(c); Please consider removing "and" between the words "odor and infiltration" and add a comma. Please also consider removing "and" between the words "control and accommodating" and add a comma. Please consider adding ", reducing erosion and leachate production." after "settlement."

Response: Agreed, this has been corrected to read:

Interim Cap. This component shall be designed to provide extended duration control of landfill odors, infiltration of precipitation into the waste mass, enhancing gas collection and control, accommodating waste settlement, and reducing erosion and leachate production.

- 114) (k)(1)(A); Please consider removing "and gas condensate" within § 6-1004(k)(1)(A). Gas condensate may be removed by other systems.

Response: The Program disagrees with the removal of this requirement. Gas condensate may be captured by other systems, but the requirement is to manage it as leachate and as such the Secretary considers gas condensate conveyance systems as part of the leachate collection system. No changes have been made.

- 115) (k)(1)(b); Please consider subdividing § 6-1004(k)(1)(B) and keeping the first sentence as § 6-1004(k)(1)(B). Take "Prevent migration of leachate beyond the containment system and off of the landfill site." And make this sentence its own sub criteria (C).

Response: Agreed. This has been corrected as proposed by the comment.

- 116) (j)(1)(C); Please consider adding "or a planned or unplanned contingency storage event" and removing the period after "event."

Response: The Program agrees that additional language is needed within this requirement to address scenarios other than the storm events that do occasionally require temporary storage of leachate on the liner; however, the Program would like to be notified and provide approval of such events prior to their occurrence. To address this and provide greater clarity to this requirement, it now reads:

(C) Restrict leachate depth to 30 cm or less over the liner system, except within the leachate sump area, under typical operating conditions.

(D) The LCRS shall restore leachate depth to less than 30 cm within five days following a 25-yr/24-hour or greater storm event, or other approved contingency storage events.

- 117) (j)(1)(D); Please consider removing “accurately and” from § 6-1004(j)(1)(D). Industrial flowmeters can have an accuracy rating of up to 90%.

Response: The wording will remain, accuracy is an important component of measuring and recording, though the Program does agree that there are limits to the technology available that put constraints on that accuracy.

- 118) (j)(1)(E); Please consider replacing “leachate collection” with “detection” within § 6-1004(j)(1)(F).

Response: For consistency with other sections of this Rule, the leachate collection system will remain named as such, with the acknowledgement that detection is also a purpose of the collection system.

- 119) (j)(6)(C); Please consider replacing “leak detection” with “leaks” within § 6-1004(j)(6)(c).

Response: Agreed, this has been corrected.

- 120) (k)(2); Please consider revising this section to make “The facility shall maintain.....” its own subcriteria within § 6-1004(k)(2).

Response: This typo has been corrected.

- 121) (l)(3); Please consider removing “shall maintain” with “may utilize” within § 6-1004(l)(3).

Response: Agreed, the use of interim cap is an option that landfills may utilize between daily cover and final cover to allow reuse of an area following settlement of the waste mass. This now reads:

The facility may utilize an interim cap. Interim caps shall consist of a flexible membrane liner or minimum.... —

- 122) (k)(6); Please consider removing “Operational units shall be designed for a life not to exceed 10 years unless otherwise approved by the Secretary.”

Response: The Program disagrees, the maintenance of 10-year plans supports sequential capping throughout the lifetime of the facility and makes permitting occur within a reasonable permitting timeframe. No changes have been made.

- 123) (k)(6); The cost to design, permit and construct is an enormous expense and should not be restricted to an arbitrary acreage. If a development area meets siting criteria, that entire area should be eligible for a permit. In addition, permits for landfills are renewed every 10 years and compliance and design review can be reevaluated by the Secretary at that time.

Response: The word acreage does not appear in the rules and certification are not limited to acreage size considerations. Certifications are issued on a 10-year basis, it is the practice of the Program to restrict review to development that can be reasonably expected to occur during that 10-year period. No changes have been made.

- 124) (l)(1)(B); Please consider replacing “prevent” with “limit” within the first sentence of § 6-1004(l)(1)(B). In addition, please consider removing “and related odors or nuisance conditions, or other hazards to public health and safety.” This is not a standard that is practical, “nuisance conditions” and “other hazards” are not measurable and therefore are not a reasonable standard.

Response: The goal of any design, operation or maintenance plan should be to prevent nuisance conditions or hazards. Although these are not measurable standards, they do serve as the performance standards against which plans can be evaluated. No changes have been made.

- 125) (l)(4); (Please consider replacing “a minimum of ten (10) inches of water column of” with “effective” within § 6-1004(l)(4). Less than ten inches of water column could be an effective pressure at a given extraction point. As long as the gas collection system is under vacuum and not allowing gas to escape beyond that required within the Vermont Air Pollution Control Division (VTAPCD) Permit issued to the facility, this requirement seems unnecessary.

Response: The Program acknowledges that there may be operating conditions that would support the operation of a given gas extraction point at less than 10 inches of water column. The requirement is a design standard, not an operating standard, as such no changes have been made.

- 126) (l)(6); Please consider removing § 6-1004(l)(6)) in its entirety. All these requirements are those regulated by the VTAPCD, layered regulation proves to be very difficult to comply with and inefficient.

Response: The VTAPCD regulations do not take effect until a landfill reaches a certain size, these rules are written for all landfill facilities including those below the VTAPCD thresholds. Although this may create layered regulations for landfills that fall under the jurisdiction of both Programs, there are no conflicting regulations. No changes have been made.

- 127) (n); It is our position that any unlined municipal solid waste landfill not already closed should receive a flexible membrane cap at time of closure. Please consider deleting section § 6-1004(n).

Response: There are no longer any unlined municipal solid waste landfills operating in Vermont. Per §6-1004(h), the Secretary may waive the requirement for a liner system for “landfills or portions of landfills that are designated solely to receive particular waste components”. This would not apply to any future municipal solid waste landfills; however, these standards need to remain in Rule to provide alternative capping options for potential monofill, or other inert material landfills that the Secretary determines a geomembrane cap is not necessary.

- 128) (i)(2)(C); clarification, recommend as follows: “Primary Liner. This component shall be designed to prevent leachate migration through the liner into the Leak Detection Drainage Layer or outside of the designed lined landfill cell area.”

Response: The Program agrees with this point of clarification, but to avoid redundancy has amended this regulation to now read:

(C) Primary Liner. This component shall be designed to prevent leachate migration into the Leak Detection Drainage Layer or outside of the designed lined landfill area.

- 129) (i)(3), A., Daily Cover. Under the earlier section, Definitions, the word Diversion is defined. It does not permit diversion of other waste materials, such as dry or semi dry sludge to be diverted for use as daily cover, as has been a practice in the past. A statement on third party monitoring is needed.

Response: Sludge can currently be approved as alternative daily cover, it is not approved as daily cover. The approval process for the use of sludge in this manner does require a review by Program staff and a demonstration that it can effectively achieve the performance standards of daily cover without negatively impacting odors or producing conditions hazardous to public health and safety. By definition, diversion does not include use of materials for alternative daily cover at landfills.

- 130) (i)(4)(A); Hydraulic Barrier Layer. A statement is needed as to how this requirement, implemented over the existing and expanded Coventry landfill, total area of 129 acres, under impermeable cover, squares with ANR

research and requirements in development to review and ensure that residential and commercial surfaces over 3 acres shall be permeable, or semi-permeable in order to mitigate storm water run-off into a surface waters. This continuous 129-acre impermeable surface area will be the largest such construction in Vermont. This section is deficient without acreage -limiting rule language.

Response: In addition to permitting under the Solid Waste Management Rules, landfills would also be subject to applicable operation and construction stormwater permits. The Solid Waste Management Rules define the materials and construction of the cap in order to provide long-term protection of the waste mass, the stormwater management rules provide the treatment options and operational practices necessary to prevent runoff into surface waters from this impermeable surface. No changes have been made.

- 131) (1); Pertaining to the leachate underdrain, a statement needs to be included requiring collection and storage of all leachate from underdrain as well as periodic testing for PFAS. To our knowledge, this has not been required in the past and only recently been undertaken. PFAS was detected in the underdrain leachate in that instance.

Response: The underdrain system is designed for the collection and discharge of groundwater beneath the landfill liner, with its primary purpose being to maintain the separation between the liner system and the seasonal high groundwater table, per the Solid Waste Management Rules. The liquids discharged are not leachate. To demonstrate compliance with §6-1003(b)(5), these underdrains are, and have been since installation, monitored regularly to assess if there is any contamination to the groundwater discharge, this contamination could be due to leakage through the landfill liner systems, but also could be due to historic land uses at the facility. These systems are designed such that the discharge can be collected and appropriately managed if it is determined to be necessary. PFAS, like any contaminant of emerging concern, was not part of this routine monitoring until detection capacity and technical knowledge advanced to a degree that determined it was a concern and it was capable of being detected. At that point it was added to the monitoring protocol. Monitoring and management of the underdrain discharge is prescribed by the facility certifications and will depend on the materials being managed at an individual facility, the land use at the facility, and feasibility of analysis. This monitoring Program can be updated by the Secretary, as necessary. No changes have been made to this Rule.

- 132) (l)(1)(A); Insert period after word “gas”. Final word “collected” is unnecessary and nullifying to the purpose. It is waste industry language and implies that it would be permissible to allow any gas to go uncollected.

Response: It is understood that not all landfill gas is collected, due to limitations imposed by necessary operational conditions; however, the system needs to be designed to effectively manage what is collected. Rules are established to ensure that the gas collection system is designed to be efficient as reasonably feasible. The efficiency of the gas system to collect the gas generated by the disposed is imposed by §6-1004(l). No changes have been made to this rule.

- 133) (l)(1)(B); the word “all” should be inserted after word “control” in middle of the single sentence for the same reason as above.

Response: See response to Comment 132 above. The Program acknowledges that not all landfill gas is collected, but the system needs to be designed to manage all that can be effectively collected.

- 134) (l); NOTE: After Item No.6, we request consideration of the addition of a new Item 7 having to do with the need for Apparatus installation designed to monitor surface emissions (SEM), - if that apparatus does not yet exist – for measurement of un-captured methane gas emissions to the environment. Such SEM reporting should be transmitted to ANR offices in real time, 24/7.

Response: The monitoring of surface emissions from landfills occurs under both the Vermont Air Pollution Control Regulations, Solid Waste Management certifications and federal regulations. The requirements contained within these Rules is consistent with other state level requirements and more stringent than the federal requirements of quarterly surface emissions monitoring. To this Programs knowledge real time monitoring of landfill surface

emissions is not currently available for continuous monitoring and reporting purposes. The Program does review new technologies and evaluate their potential use as they become commercially available. At this time, given current technologies and data management capabilities, the acquisition of more data would not provide any greater insight to the success or failure of the landfill gas collection system. The current level of monitoring, in conjunction with other performance measures is appropriate and no changes to Rule have been made.

- 135) (l)(4); Add a second sentence: A second, stand-by back-up vacuum pump-generator of equal size and capacity is required in event of failure or maintenance closure of the primary vacuum pump.

Response: All permitted solid waste facilities are required to maintain a contingency plan which is submitted for approval with the application materials. This contingency plan, per §6-704(b), will include the actions that will occur in the advent of the failure of facility design features, which includes equipment. Typically, this contingency plan does place constraints on the timeline that a facility must have access to essential equipment that must be maintained on a facility such that the facility can attain the performance measures defined within these rules. A landfills contingency plan would accordingly address access to equipment necessary to maintain the landfill gas collection system.

- 136) (m); Lined Landfill. Sub-paragraphs in this section appear to weaken storm water run-off controls rather than strengthen. Case in point is subsection 7. which eliminates the 6" minimum earthen material layer to simply a vegetative support layer that consists of earthen material capable of sustaining negative plant growth. This is laughable for it green-lights the landfill operator to seed-down over a ½" earthen base, which is literally capable of supporting germination and growth but which is absolutely susceptible to summer burn-out, wash-out in strong storms, and leachate "brown" blow-outs.

Response: As the Program would need to approve any final capping system, this language was originally removed to provide greater flexibility for the approval of innovative capping approaches and new technologies. However, for standard caps, the Program does agree that 6 inches of a vegetative support layer is preferable. As the Secretary may approve alternative final cover designs per §6-1004(m)(8), the language regarding the minimum earthen material layers has been reinserted. Ultimately any final capping system would have to attain the necessary performance criteria. If vegetation was not being supported and issues like erosion were consistently problematic, that would be considered a failure of the cover system and corrective actions would have to be taken during the closure and into the post-closure period.

§6-1005 Additional Disposal Facility Operating Standards

- 137) (c)(6); Please consider replacing "but" with "and" within § 6-1005(c)(6).

Response: Agreed and corrected.

- 138) (d)(1)(F); Consider replacing "hazardous materials" with "hazardous wastes by toxicity"

Response: Agreed, this now reads:

(F) Sludges shall not exhibit the hazardous waste characteristic of toxicity as determined using the Toxicity Characterization Leaching Procedure (TCLP); and

- 139) (d)(2)(C)(iii); Please consider removing this in its entirety. It is the responsibility of the abatement contractor to be sure that loads are packaged in accordance with the Vermont Department of Health regulations. The landfill can confirm receipt and properly dispose, confirming how it was packaged should not be required at the disposal site for health and safety reasons.

Response: The landfill has a responsibility of ensuring that the loads are properly packaged. If a load arrives and it is not properly packaged it should be rejected prior to disposal in order to protect worker health and safety. No changes have been made to this rule.

- 140) (d)(4)(B); Please consider adding “Unless otherwise approved by the Secretary,” at the beginning of rule § 6-1005(d)(4)(B).

Response: No changes have been made to the rule in response to this comment, the Program does not agree with the disposal of bulk or non-containerized liquid wastes at a landfill facility and would not approve such practice.

- 141) (f)(3); Please consider revising § 6-1005(f)(3) to read; “Sample and analyze the primary leachate and secondary detection liquid as outlined in the approved FMP and provide the results to the Secretary within 5 days of receipt of the final laboratory report.”

Response: Agreed and corrected as proposed.

- 142) (g)(2); Please consider removing § 6-1005(g)(2). Like the above referenced request, the VTAPCD regulates the surface emission monitoring requirements, so this becomes another layered regulation.

Response: The VTAPCD only requires the SEM to large landfills with a design capacity in excess of 2.5 million megagrams. VTAPCD has no requirement for smaller landfills until they reach that design threshold (design, not actual refuse in place). When a landfill reaches the criteria for VTAPCD regulation one SEM plan may be submitted to both Programs, this is layered regulation, but the two regulatory programs are not in conflict and it is not an undue burden on permittees. No changes have been made.

- 143) (d)(4)(A)(iii); Under Liquid Household Disposal at Landfills, the question is asked, "Why is liquid household waste permitted to be placed in a landfill?" If this is new wording, is it a mistake? We recommend the statement be removed, or at a minimum, the phrase, “other than septage” be added after the word “waste”.

Response: This section of the Rule is addressing containers containing liquids, not bulk disposal of liquids. Septage would not be containerized and would fall under the bulk disposal of §6-1005(B). No changes have been made.

- 144) (f); Response to Leakage Rate Exceedance. As important as this standard is, it is toothless if not monitored by a third party or by ANR regulatory personnel. The owner-operator of a landfill should not be entrusted to self-monitor and report on something of this consequence.

Response: The facility is required to report as required by their certification. That reporting provides the Secretary with the opportunity for review. Failure to report and act on a leakage rate exceedance would be in violation of these Rules and the facility certification, which serves as a motivation for the owner/operator to take these actions.

- 145) (g); All SEM reporting, including for fugitive and uncaptured methane gasses should be transmitted in real time, 24/7, to ANR offices.

Response: See response to Comment 132.

- 146) Subsection (h). Mining Waste: All references to permitted volumes of mining and/or fracking waste, produced in Vermont or Imported to Vermont to the landfill should be deleted in these rules. Such Mining Waste, Vermont-produced or imported into the State, including (radio-active) fracking waste and liquids should be categorically prohibited in any landfill.

Response: The definition of mining waste is broader than just fracking waste. In state activities, such as the processing of granite for monuments etc. or the processing of marble to produce a calcium carbonate product, do

currently occur and produce materials requiring disposal. The mining waste regulations provide the oversight of these disposal operations.

The practice of “Fracking” is not permitted in the State of Vermont, because of this ban, fracking waste would have to come from out-of-state and would require a special waste approval prior to disposal. Per these solid waste management rules, that approval would not be given to radioactive waste, hazardous waste or liquid waste materials.

- 147) (d)(1)(f); pertaining to sludge disposal and the procedure that would indicate “such materials are not hazardous”, in that sludge is now known to contain CECs, including PFAS, which would add to the load of toxins in leachate and in stormwater runoff in the event sludge is used as landfill cover.

Response: Per §6-1005(d)(1)(A) Sludges shall only be *disposed* at municipal solid waste landfills. This rule prohibits the use of sludge as landfill daily cover. As the comment indicated, any sludge being reviewed for approval as alternative daily cover, and sludges being disposed at a Vermont landfill are subject to Toxicity Characterization Leachate Procedure (TCLP) analysis to determine that the materials are not hazardous. As CECs are added into regulatory programs, they can be added to that analytic protocol. No changes to Rule are necessary to incorporate CECs into the analytical protocol.

§6-1006 Additional Application Requirements.

- 148) (a); After “disposal facility”, add “or the addition/expansion/ or extension of permit period time of a disposal facility, shall include ...”

Response: Expansions of existing facilities or significant changes in construction design or operations do require permitting per Subchapter 5. Subchapter 5 defines which types of activities are subject to each of the application types, this section is only intended to identify additional submittals required for these specifically identified solid waste facilities types.

- 149) (b); After “new landfill facility”, add the phrase “and/or the addition/ expansion of an existing permitted landfill, or extension of permit period of time for an existing permitted landfill, shall include the following....”

Response: See response to comment 148.

- 150) (c); Mining Waste: We feel all five sections should be deleted. Two sentences should follow the heading and read as follows: Mining wastes are prohibited in a landfill. No mining waste, including solid or liquid waste from (radio-active) fracking operations, should be permitted to be diverted from sources of origin, within or without of Vermont, then transferred for disposal to a Vermont permitted landfill.

Response: As per comment 146 above; The definition of mining waste is broader than just fracking waste. In state activities, such as the processing of granite for monuments etc. or the processing of marble to produce a calcium carbonate product, do currently occur and produce materials requiring disposal. The mining waste regulations provide the oversight of these disposal operations. No changes have been made.

- 151) (b)(6); Please consider removing § 6-1006(b)(6). Like the above referenced request, the VTAPCD regulates surface emission monitoring, so this becomes another layered regulation.

Response: See response to comment 141.

- 152) (b); Please consider removing § 6-1006(b)(7) & § 6-1006(b)(8), these are plans already described within the FMP.

Response: The requirements for a Facility Management Plan (FMP) are described in §6-504(e)(8), these requirements are for all solid waste facilities. As such the inclusion of these two plans, specific to landfills, should remain in this section. By specifying that they must be submitted within this section, the Program is not excluding them from being submitted as part of the FMP. No changes have been made.

§ 6-1009, Disposal Facility Custodial Care

- 153) (b)(3); Disposal Facility Custodial Care- it would be prudent to include language that addresses the presence of CECs, including PFAS, as these “forever” chemicals would continue to pose environmental and public health and safety threats over a very extended period of time.

Response: As determined to be appropriate, contaminants of emerging concern will be added to the post-closure monitoring programs over the post-closure period. A landfill applying for custodial care would be evaluated against any and all monitoring that had occurred at that facility, and any existing regulations at the point of the custodial care application. The performance criteria of demonstrating acceptable leachate quality and quantity would take this into consideration. No additional language is necessary.

- 154) (b)(5)(A); Surface Water System. The wording should be changed to reflect a higher environmental and safety standard, particularly as we experience larger and more frequent storm and weather events in a time of climate change. Specifically, the 25-year, 24-hour storm event standard as written, should be changed to a 100-year, 24-hour storm event. This is fundamental when planning for a contiguous 129-acre impermeable area.

Response: Facilities that have moved out of operational activities and into post-closure range in age from fairly recent closures to those that have been closed for over twenty years. Although the current standard is planning for the 100-year, 24-hour storm event, some of the historic closures did not occur under this regulation. For this reason, the evaluation of approval for custodial care can not be to the same current design standard. However, in consideration of this comment, the Program has rewritten this condition to reflect approval for custodial care to be made in consideration of the applicable design standards for each facility. This way the more stringent recent design standard will need to be attained for more recently closed facility. This regulation now reads:

(A) The surface water diversion system shall be shown to continue to prevent surface water flow on the capped landfill in accordance with the design requirements that imposed and approved during closure.

- 155) (e); This “custodial care” approval section fails to recognize the need to continually require mowing of the area above the closed landfill cell to prevent deep rooted, woody growth from damaging the landfill cap. Please add language to require mowing, and funding to assure mowing, in perpetuity. Towns provide such mechanisms for the maintenance of their town cemeteries. This can AND SHOULD be done for landfills in perpetuity.

Response: Approval for custodial care does require ongoing maintenance of the landfill cap and infrastructure, as necessary to protect human health and safety and the environment. These conditions have typically been included within the certifications, but the program acknowledges that the addition of these conditions to rule would be beneficial. The conditions now reads:

- (e) The approval for cessation of post-closure care and initiation of custodial care does not relieve the owner/operator from taking any and all necessary actions to protect human health and the environment. This includes:*

(1) Any necessary corrective actions as may be required by the Secretary under 10 V.S.A. § 6615.

(2) Necessary continued maintenance (mowing, erosion repairs etc.) performed on a schedule necessary to maintain performance of the landfill cap;

(3) Institutional controls to maintain access control and prevent risk; and

(f) The custodial care approval shall not release the owner/operator from potential liability to third parties resulting from releases which occur(red) during the operating life, closure period, post-closure period or custodial care period.

Subchapter 11 – Compost Facilities

- 156) *General question: Many small farms are filling a collection niche by collecting food scraps for animal feed and allowing chickens to “graze” on compost prior to composting the materials. This is not addressed in the SWMR Subchapter 11. We would recommend that some guidance be presented, at least in terms of how these materials should be best managed.*

Response: The Solid Waste Management Program’s oversight is in the transfer, storage, treatment and disposal of solid waste. Feeding a solid waste to livestock is outside of that scope. However, composting solid waste is treatment, so these Rules specify regulations pertaining to that activity. It should be noted that these Rules do not prohibit foraging on compost piles so long as the general composting performance standards continue to be met. Farmers choosing to compost registration or permit-required amounts of solid waste will simply need to include their foraging access procedures in the facility management plan submitted at the time of application. This allows the operational flexibility necessary on a farm-by-farm basis so long as nuisance, environmental and public health general performance standards are complied with.

§ 6-1102 Organic Specific Definitions (starting on p.144)

- 157) *“Organics”: Recommend changing “Organics” to “Organic Materials”.*

Response: The Program agrees that the term “Organics” can be improved upon. However, “Organic Materials” is too broad a term and at face value could be misinterpreted to include materials that have not been discarded. We are proposing to replace “Organics” with “Organic Solid Wastes” in this context to clarify we are speaking only about organic materials that meet the definition of solid waste.

“Organics Solid Waste” means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition of organics.

- 158) *“Compost”: We’d recommend, adding: “...means a stable humus-like material produced by the controlled ‘aerobic’ biological decomposition through active management ‘conducted under approved best management practices’...*

Response: The Program agrees, and the following revision is proposed:

6-1102(e) “Compost” ~~the product of composting; consisting of a group of organic residues or a mixture of organic residues and soil that have been piled, moistened, and allowed to undergo aerobic biological decomposition~~ means a stable humus-like material produced by the controlled aerobic biological decomposition of organic matter through active management, but shall not mean sewage, septage, or materials derived from sewage or septage.

- 159) *Also, there is a typo under “Composting” – under “managed.” We’d again recommend that best management practices be added.*

Response: The typo has been corrected and the definition in Subchapter 11 has been revised to match the

definition in Subchapter 2, see the proposed revision below:

6-201 "Composting" means the controlled aerobic biological decomposition of organic matter through active management to produce ~~a stable humus-rich material~~ compost (as that term is defined in 10 V.S.A. §6602 and subchapter 11 of these Rules).

6-1102(g) "Composting" means the ~~accelerated~~ controlled aerobic biological decomposition of organic matter ~~under~~ through active management ~~aerobic conditions resulting in~~ to produce compost.

- 160) "Compostable": It would be beneficial for composters to include a "certified compostable" definition for serveware and certified compostable collection bags.

Response: The Program does not understand how a composter would benefit from a definition of certified compostable service ware and collection bags. The Rules require all non-compostable materials be removed from the compost upon receipt at the facility. It is the operator's choice to accept compostable service ware/collection bags, and thus it is the operator's responsibility to work with contributing generators to assure that any service ware and/or collection bags used are compostable. No change to the Rules is proposed.

- 161) "Contaminant" means any **non-biodegradable** material which lends impurity to compost, including but not limited to, glass, metal, plastics, and ceramics. *We'd suggest removing "non-biodegradable" to allow for more flexibility as we learn more about contaminants. Or, instead of "non-biodegradable" (as this term has proven to be very confusing), consider "noncompostable."*

Response: The Program agrees with this commenter's concern that the definition of "contaminant" is too narrow. We are proposing the following revision:

"Contaminant" means ~~any non-biodegradable~~ material which lends physical or chemical impurity to compost, including ~~but not limited to~~, glass, metal, plastics, and ceramics.

- 162) As used in this Subchapter and Subchapter 12 the following additional definitions apply: (k) "Contaminant" means any **non-biodegradable** material which lends impurity to compost, including but not limited to, glass, metal, plastics, and ceramics. **Comment:** Perhaps allow room for contaminants that come along with some biodegradable materials (e.g., PFAS)? Removing "non-biodegradable" may allow for more flexibility as we learn more about contaminants.

Response: The Program agrees, see response to comment #159 above.

§ 6-1103 Organics Specific Exemptions

- 163) (a); The following activities are exempt from the requirements of this subchapter: (1) A person(s) composting 100 cubic yards or less annually of combined feedstocks per year of total organics, of which not more than 42 cubic yards per year are food residuals and food processing residuals is not subject to regulation under these Rules. This exemption does not apply to the collection and composting of off-site generated animal offal, slaughterhouse wastes, or animal mortalities.

Comment: I have had conversations with Ben about the 42 cubic yard / 100 cubic yard issue (as stated in item 1 of this section), as it pertains to sites that may already be composting exempt materials greater than 100 cubic yards, that may want to add foodscraps – particularly with regards to supporting increased on-farm composting of food residuals. I have provided a few different iterations of language addressing this point.

Consider adding one of the following: A person(s) already composting more than 100 cubic yards of otherwise exempt materials, who adds no more than 42 cubic yards per year of food residuals is not subject to regulation under these Rules. This exemption does not apply to the collection and composting of offsite generated animal offal, slaughterhouse wastes, or animal mortalities. The composting of no more than 42 cubic yards or less of food residuals, provided that the food residuals do not exceed 42% of total composted materials.

Or amending (6) to read: (6) The composting of **no more than 42 cubic yards of food residuals, and/or** 1,000 cubic yards or less of food processing residuals per year when the composting takes place on a farm. (4) Facilities that compost solely any of the following materials, provided the compost is used for soil enrichment: (A) any amount of animal manure;

Question: ... , **that is allowable under the farm's nutrient management plan;** Is the above addition what is intended? Or does this include any amount of manure that may also be sold for soil enrichment elsewhere?

Response: As this comment states, the 6-1103(a)(1) exemption could potentially negate other applicable 6-1103 exemptions and has specific implications for farms. This was an unintended consequence. The Program is proposing to modify the 6-1103(a)(6) language to specifically target the importation of solid waste to a farm. Farms which qualify for an exemption under this section will still need to demonstrate capacity for the additional nutrient importation via their nutrient management plan.

6-1103(a)(1) A person importing for composting up to 100 cubic yards or less per year of total organics solid wastes, of which not more than 42 cubic yards per year are food residuals and food processing residuals is not subject to regulation under these Rules. This exemption does not apply to the collection and composting of off-site generated animal offal, slaughterhouse wastes, or animal mortalities.

§ 6-1103 Organics Specific Exemptions

- 164) The following activities are exempt from the requirements of this subchapter: (1) A person(s) composting 100 cubic yards or less annually of combined feedstocks per year of total organics, of which not more than 42 cubic yards per year are food residuals and food processing residuals is not subject to regulation under these Rules. This exemption does not apply to the collection and composting of off-site generated animal offal, slaughterhouse wastes, or animal mortalities.

This is confusing when compared to on-farm composting exemptions. Clarification of the differences between community composting and farms or integrating the exemptions would be helpful.

Response: Some exemptions apply to farms which conduct specific activities, and some do not. It is less confusing to list the exemptions separately than to try to consolidate them all. The Solid Waste Management Rules do not have a definition for community composting, so a composting activity is either exempt or requires a registration/certification. No organizational changes are proposed.

- 165) (4); *Does this allow farms to take off-site materials? Seems like a lot of manure. And, does this apply to CC using these feedstocks as long as materials are used onsite?*

Response: This provision exempts anyone composting those materials from needing to register or certify the activity assuming the finished compost is used for soil enrichment regardless of the generation status of the feedstocks.

- 166) (6) Composting of food residuals: Similar to above question- *Does this include off-site generation? Why is this so much different from community composting? Also, what sort of BMPs are going to be put in place for farms to handle this amount of material? What's to ensure that small farms can manage the material onsite and in accordance with their farm nutrient management plan.*

Response: To provide context, the section of the Rules this comment is addressed to is: *(6) The composting of less than 1,000 cubic yards or less of food processing residuals per year when the composting takes place on a farm.*

Does this include off-site generation?

This does include off site generation.

Why is this so much different from community composting?

These Rules do not have a definition for "community composting" so the Program is unable to respond.

Also, what sort of BMPs are going to be put in place for farms to handle this amount of material?
 No BMP's will be put in place. Normal farm composting practices and the siting standards specified in section 6.09 of the Agency of Agriculture, Food and Markets' Required Agricultural Practices will apply. What's to ensure that small farms can manage the material onsite and in accordance with their farm nutrient management plan.
 Small farms need to adhere to the Nutrient Management Planning requirements in 6.03 of the Agency of Agriculture, Food and Markets' Required Agricultural Practices if the finished compost is intended to be applied to fields.

- 167) (9) Burial of four or less animal carcasses per year when the disposal occurs in accordance with the following siting requirements:
- (A) One-hundred-fifty (150) feet from the property line and the top of bank of or surface waters,
 - (B) three (3) feet above the seasonal high water table and bedrock,
 - (C) two hundred feet from public or private drinking water supplies; ~~and~~
 - (D) covered with a minimum of 24 inches of soil, and;
 - (E) not located on lands in a floodway or subject to annual flooding.

Response: The Program finds that the majority of the suggested revisions in this comment improve environmental protections. They are also inline with siting criteria applied elsewhere in these Rules for similar organic solid waste management. The following language is proposed:

- (9) Burial of four or less animal carcasses per year when the disposal occurs in accordance with the following siting requirements:*
- (A) One-hundred-fifty (150) feet from the property line or surface waters,*
 - (B) three (3) feet above the seasonal high water table and bedrock,*
 - (C) two hundred feet from public or private drinking water supplies; ~~and~~*
 - (D) is covered with a minimum of 24 inches of soil, and;*
 - (E) is not located in a floodway.*

§ 6-1104 Compost Facility Types

- 168) (b) Medium Scale Composting Facility – A facility is a medium scale composting facility under these Rules if the facility:
- (2) composts the following materials:
 - (C) more than 10,000 cubic yards per year of leaf and yard waste; or
 - (D) compost 40,000 or less cubic yards per year of total organics consisting of any of the following feedstocks:
 - (i) not more than 5,000 cubic yards per year are food residuals or food processing residuals.
 - (ii) not more than 10 tons of animal mortalities, slaughterhouse waste or offal animal offal, and butcher waste per month.
 - (E) is a vermicomposting facility that is not eligible for the exemption provided by § 6-302(a)(17).

Comment: I'm just flagging (E), as it seems oddly out of place... perhaps this should be item (3)?

Response: Correct, this is an organizational typo. Revised to the following:

- (1) ~~This section applies to composting facilities that have a compost management area of less than 10 acres in size; ~~and~~ or~~*
- (2) composts the following materials:*
- (AC) more than 10,000 cubic yards per year of leaf and yard waste; or*
 - (BD) ~~compost~~ 40,000 or less cubic yards per year of total organics consisting of any of the following feedstocks:*
 - (i) not more than 5,000 cubic yards per year are food residuals or food processing*

residuals.

(ii) not more than 10 tons of animal mortalities, slaughterhouse waste or offal ~~animal offal, and butcher waste~~ per month.

(3E) is a vermicomposting facility that is not eligible for the exemption provided by § 6-302(a)(17).

- 169) §6-1108(b)(4)(A) – typo - should read: “If using a turned windrow system, the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least 13 of ~~16~~ 15 consecutive ~~15~~ days.

Response: This has been corrected to the following:

(A) If using a turned windrow system, the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for ~~at least 13 of 16 consecutive~~ 15 days. ~~during which time the materials~~ Windrows must be turned not fewer than five times with a minimum of 3 days between turnings to ensure that all materials reach this temperature. The 15 days do not have to be consecutive.

§6-1102 Organic Specific Definitions

- 170) VAAFM requests that the inclusion of the following definition:

“Agricultural Waste” means material originating or emanating from a farm that is determined by the Secretary or the Secretary of Natural Resources to be harmful to the waters of the State, including: sediments; minerals, including heavy metals; plant nutrients; pesticides; organic wastes, including livestock waste, animal mortalities, compost, feed and crop debris; waste oils; pathogenic bacteria and viruses; thermal pollution; silage runoff; untreated milkhouse waste; and any other farm waste as the term “waste” is defined in 10 V.S.A. § 1251(12).

In requesting to include this term, VAAFM requests that agricultural wastes be used in addition to the listed agriculturally related materials that are often composted: animal offal, slaughterhouse wastes, or animal mortalities. Under the RAPs, animal mortalities are included as an agricultural waste, however, VAAFM understands that when referring to certain provisions, the focus is on animal mortalities and not necessarily all agricultural wastes. VAAFM requests to include this provision as other agricultural wastes can and are composted, such as livestock waste.

Response: It is unclear what benefit introducing this definition will serve. The draft Solid Waste Management Rules apply to facilities that compost organic solid wastes, but the Rules do not preclude a compost operator from also composting organics materials that are not defined as solid waste, such as “agricultural wastes”. The composter would simply have to include the characteristics of each desired feedstock in the application at the time of submittal for approval by the Program. No change is proposed at this time.

- 171) VAAFM requests that the inclusion of the following definition:

“Anaerobic Digester” means a facility that provides biological treatment of animal waste in the absence of oxygen.” VAAFM asks to include the NRCS definition of an anaerobic digester, Practice Code 366, for purposes of consistency across agencies and organizations.

Response: The NRCS definition of Anaerobic Digester provided in the comment above is too narrow in scope for the purposes of the Solid Waste Management Rules as it limits feedstocks to animal waste. The Program prefers the broader definition of “Anaerobic Digestion” in § 6-1102(c):

§ 6-1102 (c) “Anaerobic digestion” means the controlled anaerobic decomposition of ~~organic~~ food residuals, manure, animal feed waste, and other natural organic waste materials inside a containment structure or vessel, generally resulting in the production of methane-rich gas.

- 172) VAAFM requests that the inclusion of the following definition:

"Farm" means a parcel or parcels of land owned, leased, or managed by a person and devoted primarily to farming, as defined in Section 2.16 of the Vermont Required Agricultural Practices Rule, and that meets the threshold criteria as established in Section 3 of the Vermont Required Agricultural Practices Rule, provided that the lessee controls the leased lands to the extent they would be considered as part of the lessee's own farm. Indicators of control may include whether the lessee makes day-to-day decisions concerning the cultivation or other farming-related use of the leased lands and whether the lessee manages the land for farming during the leased period.

VAAFM makes this request as defining what farm operations fall under the jurisdiction of VAAFM and the RAPs is an important differentiation that isn't explicitly clear with the current proposed definition.

Response: The Program agrees with the commenter. Defining a farm operation falls under the jurisdiction of VAAFM, and we are proposing to change this definition to the following:

"Farm" means a parcel or parcels of land owned, leased, or managed by a person and devoted primarily to farming, as defined and determined by the Vermont Agricultural Practices Rule (RAPs). ~~a place used for agricultural or horticultural use and/or cultivation or management of land for orchard crops or food, fiber, Christmas trees, maple sap and maple syrup products, animal husbandry, fish or bees or a greenhouse operation, on-site storage of agriculture products principally produced on the farm or the on-site production of fuel or power from agriculture products or waste principally produced on the farm~~

§6-1105 Small Composting Facilities – Accepted Composting Practices

- 173) VAAFM has concerns regarding provision (c)(1)(D) of this section: Small Composting Facility Design. Any waste runoff that is generated on a farm operation that may also meet the definition of a small composting facility may not be directed to a vegetated treatment area (VTA) under VAAFM and NRCS standards. Both VAAFM and NRCS do not design systems where concentrated waste is directed into VTAs as a management technique, regardless of farm size. This would also hold true for compost management areas where the current proposed amendment includes language directing water runoff from compost management areas into the VTA. NRCS designs VTAs to manage high flow leachate, and VAAFM strongly advocates to include this distinction in the SWMR amendment.

Response: The Accepted Composting Practices would not apply to high-strength liquid, concentrated waste or any farm related runoff. It would only apply to the compost management area of small solid waste composting facilities built and operating in accordance with the ACPs. The only material on the pad would be properly mixed compost windrows. The VTA would not be treating liquid from other farm activities such as feedlots, manure management, etc. Under no circumstances could a farm applying for a small composting registration utilize the VTA for treatment of any farm liquid. The Program continues to find a VTA to be an acceptable means of treating compost leachate from a small composting operation. No changes proposed at this time.

- 174) Small Compost Facility Siting AND Medium and Large Compost Facility Siting (to match Waste Storage Facility setbacks):
- (1) 300 feet from the nearest public or private water supplies not owned by the applicant;
 - (2) 3 feet from seasonal high water table and bedrock;
 - (3) 200 feet from the top of bank of surface water;
 - (4) 100 feet from a ditch or conveyance to surface water;
 - (5) areas subject to concentrated runoff, including subsurface tile drainage;
 - (6) 100 feet from all property lines and edge of public roads; and
 - (7) 300 feet from all residences not owned by the applicant and from all public buildings;
 - (8) The 100 year flood plain as shown on the National Flood Insurance Maps;
 - (9) A class I or class II wetland or its associated buffer zone unless a conditional use determination has been issued by the Secretary;
 - (10) A class III wetland unless authorized by the Secretary;

- (11) Any location within a municipality where that municipality has prohibited composting as a part of its zoning bylaws;
- (12) Within a designated downtown or village center, unless the municipality has expressly allowed composting in that area.
- (13) Within 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft.

Response: The Program appreciates the attempt to align requirements for similar activities across Agencies, but it is not appropriate to compare AAFFM waste storage facility setback requirements with compost management area setback requirements. Composting is an active biologically controlled treatment process, with designed recipe and frequent pile management to assure optimal composting. The two activities do not present the same level of risk. The existing setbacks are adequate, and no changes are proposed.

§6-1107 Medium and Large Compost Facility Design Standards

- 175) (a)(4)(A); VAAFM uses the term waste storage facility (WSF), NRCS Practice Code 313, to define available methods of storing waste on a farm operation.

“Waste Storage Facility” means an impoundment made for the purpose of storing agricultural waste by constructing an embankment, excavating a pit or dugout, fabricating an in-ground or above-ground structure, or any combination thereof. (Section 2.41 of the RAPs)

As leachate is considered an agricultural waste, it’s storage can be considered to be a waste storage facility, which is the method VAAFM would implement to manage such materials. Waste storage facility would be a more accurate term in place of lagoon, to describe the method for waste management that would be prescribed by the Agency, meeting the NRCS Standards of Practice Code 313.

NRCS Practice Code 378 refers to a pond: “A pond stores water for livestock, fish and wildlife, recreation, fire control, erosion control, flow detention, and other uses such as improving water quality.”

NRCS Practice Code 359 refers to a waste treatment lagoon: “A waste treatment impoundment made by constructing an embankment and/or excavating a pit or dugout.”

Response: The Program agrees with the comment and proposes the change below as they apply to farm structures. It is important to note however, that not all certified solid waste composting facilities are located at farms.

(4) Leachate storage.

(A) All facilities subject to the standards of this subsection shall ~~are required to~~ collect and treat all leachate from the active composting area in a lined pond, swale or lagoon. The leachate storage area shall meet the following ~~construction~~ design standards:

- (i) be single lined with a natural or synthetic liner that has a maximum permeability of 1×10^{-7} cm/sec, in a design approved by the Secretary; or*
- (ii) be constructed in accordance with Natural Resource Conservation Service code ~~378~~ 359 standards and approved by the Secretary; or*
- (iii) be a waste ~~management lagoon~~ storage facility constructed consistent with the Agency of Agriculture, Food, and Markets standards; or*
- (iv) an alternative structure as proposed which meets the equivalent hydraulic conductivity design standards above as approved by the Secretary.*

- 176) (a)(6)(D)(i); VAAFM requests to include to following provision in place of current provision:
- (i) Application rate shall not exceed agronomic rates, soil analysis and agronomic recommendations.
- Or

- (i) Application rate shall not exceed nutrient recommendations such that it ceases to be useful or beneficial for plant uptake.

Response: The Program agrees with this comment and proposes the following revision.

- (i) Application rate shall not exceed an appropriate agronomic rate based upon soil analysis and the corresponding agronomic recommendations. In no cases shall an application rate exceed 25,000 gallons per acre per day

Subchapter 12 – Organics Management Facilities

§6-1202 Organics Management Facilities

177) (b)(4)(viii); VAAFM requests to include the following language in place of current provision:

(viii) digestate meets standards for pathogen treatment and contaminant content and concentration established by the Secretary or Secretary of Agriculture, Food, and Markets. Digestate meeting these standards may be exempted from solid waste disposal siting and certification requirements where collection and land application occur under an approved nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 and, if not used on crops for direct human consumption, and if applied in a manner that minimizes the potential for contact with such crops, both during and after application to such crops.

Response: The Program agrees with the commenter that this section contained a lot of artifacts from the editing process and needed revision. The proposed language is listed below.

(viii) digestate ~~that meets the~~ standards for pathogen treatment and contaminant content and concentration established by the Secretary or Secretary of Agriculture, Food, and Markets may be exempted from solid waste disposal siting and certification requirements where collection and land application occurs under an approved nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 —Nutrient Management but if not ~~authorized for use~~ on crops for direct human consumption; ~~or~~, and is applied in a manner that minimizes the potential for contact with such crops.

§ 6-1202 Organics Management Facility Types; Authorization

- 178) (a); **Question:** Are other organics purposefully being omitted here? What about non-recyclable paper products (e.g., waxed or soiled fiber), for the facilities that accept them – can these be collected at an Organics Drop-Off Facility?

Comment: Overall, we're glad to see provisions and guidelines for Organics Drop-Off Facilities!

Response: Given the limited nature of the registration and operational requirements for these drop-offs, the intent is to limit the collection to clean food residuals only. Registrants may choose to utilize compostable odor and vector mitigants such as non-contaminated wood shavings. Those procedures and materials shall be detailed in the facility management plan. If an applicant desires to manage other solid wastes they may do so by obtaining a transfer station certification. For additional clarity, the Program is proposing to revise the title of these registrations to "Food Residual Drop-Off Facilities". See proposed language below.

§ 6-1202 Organics Management Facility Types; Authorization

(a) ~~Organics~~ Food Residual Drop-Off Facilities. Facilities that accept solely food residuals at a volume of less than 144 gallons per week shall register with the Secretary pursuant to § 6-1206 of this subchapter.

- 179) (a); *We assume that an “Organic Drop-Off” site is designated as a collection site where collected materials must be hauled to a compost site.* This doesn’t include collection of organic materials at a composting facility, where participants would drop-off organics. The distinguishing feature is that the collection is integral to the composting facility.

Response: This registration would only be for locations that are transferring materials off-site. Certified composting facilities can seek approval for a public access food residuals drop-off as part of their certification.

- 180) (a); The definition as stated allows for only the collection of food residuals. Does this prohibit the collection of soiled paper (napkins, pizza boxes)? Also, what if the food scraps in the drop-off container are covered with wood shavings as a biofilter. *If these are allowed, we would ask that the definition state this.*

Response: See response to comment #178.

- 181) (a)(1)(i); Organics storage containers must be located “50 feet from property lines”: This may be unreasonable in both downtown areas (if businesses share dumpsters), and in towns where containers may be located on public works or other town properties. *Is there a possibility of an exemption to this, or some sort of caveat in the definition, such as – “...recommended that storage containers be located 50 feet from property lines, if practical or otherwise operated without odor or other nuisance incidents.*

Response: This siting regulation has been revised to the following:

§ 6-1203(a)(1)(i): *Organics storage containers shall be located a minimum of 50 feet from property lines unless otherwise approved by the Secretary.*

Subchapter 13 – Residuals Management Facilities

§6-1302 Residuals Management Facility Exemptions

- 182) (b); page 156: Residuals Management Facilities General Exemption 50 lb. bags. The reference noted for regulation of material greater than 50 lb should read 6-1303(a)

Response: Thank you for the comment – corrected to read “6-1303(a)”

- 183) (b); Recommend increasing the net weight from 50 lbs up to 2000 lbs to enable the use of agricultural super sacs. These 1-ton sacs are used by golf courses and athletic fields with Milorganite and other fertilizers.

Response: No further changes made. The Program’s goal for the EQ biosolids importation registry is to track large batches of this material entering Vermont but not ‘off the shelf’ products intended for public retail and individual use on small scales (i.e., 50 lb bags). Importation of a ton of biosolids rises to the level of a bulk use of the material, in the Program’s view, and therefore would not be exempt.

§6-1303 Exceptional Quality Biosolids

- 184) (a)(2); We urge the Agency to consider including all EPA Class A Alternatives, not just 1,2,5 and 6 as it applies to EQ biosolids pathogen reduction requirements. Aligning with the EPA Part 503 Biosolids Regulations would allow for the beneficial reuse of Class A biosolids that are confirmed low in pathogens by testing, without having to go through an additional expensive treatment process.

Response: Under 40 CFR 503, the set of pathogen indicator organisms that may be selected for Class A demonstrations is expanded from the testing of fecal coliform or salmonella s.p. densities, the only indicator organisms allowed for Class B demonstrations, to include viable helminth ova (parasitic worm eggs) and enteric

viruses under Class A: Alternatives 3 and 4, neither of which include process-based requirements. Of the six Class A Alternative demonstrations established in Part 503, Vermont only accepts the four Part 503 alternatives (Class A: Alternatives 1, 2, 5, and 6) that do include process-based treatment requirements and that do not recognize the use of viable helminth ova or enteric viruses as indicator organisms. Vermont has adopted this approach for two main reasons: 1) the Program believes that in order to further assure pathogen kill, treatment in a process based on a time/temperature relationship or chemical environment necessary to assure pasteurization is requisite, and 2) the density of viable helminth ova and/or enteric viruses in raw sewage is commonly sufficiently low such that it can meet the Class A standard absent any treatment for pathogen reduction. In other words, the Program believes that a measurement of the absence of these organisms in treated biosolids does not demonstrate the degree of pathogen reduction achieved by the process because the organisms may not have been present in raw sewage to begin with. Furthermore, a determination of the presence/absence of viable helminth ova and enteric viruses in raw sewage may result in the need to seed systems with these pathogen indicators ahead of the pathogen reduction treatment process in order to obtain usable data on the level of their destruction. The program believes it is unsafe and unnecessary (when other testing is available and effective) to intentionally add/seed dangerous pathogens into the raw sewage or sludge in order to prove the pathogens are being destroyed or reduced through the treatment process. The Program will therefore not approve any process that requires seeding helminth ova or enteric viruses (or any other pathogen indicator organisms) in order to have sufficient densities in the raw sewage for the ability to make a compliance demonstration in the treated biosolids.

185) (b)(3); The rule referenced at the end “6-1304(a),(g), and (i)(3)” does not exist.

Response: Thank you for the comment – corrected to read “6-1303(a)(g) and (i)(3)”

§6-1306 Residuals Management Facility Operating Standards

186) (b); application on.... frozen or snow-covered ground. “Snow Covered” has been broadly interpreted to consider from a dusting of snow to complete cover with snow. This section appears to assume surface application requiring with incorporation to follow. Please consider a revision for direct injection of biosolids when snow is present with ground exposed and soil is not frozen.

Response: The Program prefers to maintain this prohibition but has added the following language to the Rule: the Secretary may approve applications on a case-by-case basis upon a determination that current weather conditions and application techniques to be used will not result in abnormal nutrient loss, runoff, or threat to human health or the environment

187) (p); General comment of concern: The cumulative limits in soils in the table in this section for all heavy metals are identical to the maximum allowable levels in biosolids being land applied on farm fields, with the exception of Mercury. In the case of Mercury, the cumulative level limit is raised from 10 mg/kg, dry wt. to 17. Mercury is a highly toxic and persistent heavy metal linked to neurological effects in humans and animals. These fields will be used for the growing of crops and hay for animal feed used for production of human food. Mercury bioaccumulates. The Residuals Management Section 20 years ago attempted this change in the Rule, in addition to raising the allowable levels of Hg in biosolids to be land applied to similar levels. This proposal was met with public outrage and the program backed off. Now here it is again. Please do not move forward with this proposed change, allowing increased cumulative levels of Hg on our precious food producing lands.

Response: No further changes made. The Program questions if the comment mistakes ceiling concentration for cumulative loading rate. Previous VSWMRs did not contain cumulative maxima other than for cadmium at 4.5 lbs/acre (5.0 kg Cd/hectare). Cumulative maxima for all other regulated metals are included in the new rule for the first time, and reflect the Part 503s, which for mercury, is 17 kg/ha (~15.2 lbs/ac). The ceiling concentration is *not* proposed to change from 10 to 17 mg/kg, dry. The cumulative rates in 503 were back calculated from the Table 3 (EQ) pollutant limits, not the Table 1 numbers, so mercury is based on the Table 3 ceiling limit of 17 kg/ha, not the 57 kg/ha from Table 1. With the exceptions of cadmium, where the VSWMRs has retained its

historic standard (derived from 40 CFR Part 257-3.5) of 4.5 lbs Cd/acre (5.0 kg Cd/hectare) compared to the federal standard of 39 kg Cd/hectare (34.7 lbs Cd/acre); chromium and molybdenum, where Vermont continues to enforce the CPLRs for these contaminants that were vacated by the federal court action; and arsenic, where the federal CPLR was decreased in proportion to the reduced ceiling concentration (from 75 kg As/hectare down to 15 kg As/hectare); Vermont observes the federal standards.

General Comments From AAFM

188) Any concerns that originate from VAAFM related to the SWMR are focused on the appropriate application of nutrients on farm fields, including quantity of nutrients, location of any applications, and the concentrations of nutrients in any respective material. VAAFM requests that any requirements that may apply to nutrient management, storage, and application for farm operations that also fall under the jurisdiction of the SWMR, meet or exceed the requirements established in the RAPs.

- Such requirements would include the prohibition of any application on a field where the soil test phosphorus is above 20ppm if a phosphorus reduction strategy is not present.
- Requiring the inclusion of biosolids when farm operations calculate the Phosphorus Index (P-Index) on their farm fields, as opposed to using a general value of 50. This would help determine if fields can or should be receiving any additional nutrients and would contribute to further understanding relating to land base constrictions for farm operations.
- Additional requirements would allow applications on fields only when applied at agronomic rates during times when crop uptake can occur.

Response: §6-1306 includes specific provisions to align land application of biosolids or septage with VAAFM guidelines, including (a) prohibitions on spreading between 12/15 and 4/15, between 10/16 and 4/14 in land with frequently flooded soils, and between 12/1 and 12/15 and 4/1 and 4/30 when VAAFM determines that manure spreading would create potential runoff; (b) that all land application sites are incorporated into a Nutrient Management Plan developed by a certified planner to meet or exceed standards of the RAPs; (c) application rates determined in accordance with “Nutrients Recommendations for Field Crops in Vermont” published by the University of Vermont Extension. The ‘general value of 50’ is a misunderstanding of our former application rate calculator, which actually does not use the P index at all in its calcs and it merely asks you to input it and then it ‘flags’ the user if values are ‘high’. The Rules already require, under §6-1305 (c)(3), that land application rates are based on agronomic rates.

Comments From CLF “Comments on Solid Waste Management Rules”, dated April 7, 2020

189) The Agency must establish comprehensive controls to prevent exposure to unsafe levels of PFAS in soils, surface water, and groundwater

Response: Revisions to the Rules have been modified to include PFAS monitoring requirements for sludges, land applied biosolids (class B) and septage, and Exceptional Quality (EQ) (Class A) biosolids, under §6-1306(n) of the Rules. As proposed, the frequency PFAS monitoring will be established pursuant to §6-1306(q)(Table 1) (for facilities covered under a Sludge Management Plan) or in the facility certification (pursuant to §6-1306(r)(Table 2)). Testing would include both regulated PFAS and for other PFAS determined to pose health risks and for which the Secretary has determined that reliable testing and analytical methodology is available.

In addition, revisions now include PFAS monitoring requirements for soils, groundwater and plant tissue at all certified land application sites under §6-1306(r)(Table2) and (s). Like other parameters of concern, PFAS monitoring would be required at least annually, or at a frequency otherwise specified in the solid waste certification.

The Rules have also been modified to include specific PFAS-related requirements for EQ biosolids (produced in VT or imported). The proposed revisions now require PFAS testing in accordance with §6-1307(n), for PFAS testing results to be provided upon application for certificate of approval for imported EQ biosolids, and revocation certificate upon failure to provide PFAS testing results. Additional revisions would require product

labeling to include a statement that the product may contain PFAS, annual reporting of PFAS test results, and record keeping requirements - see §6-1303(a)(4); (c)(2)(A)(iii); (c)(2)(B)(iii); (e)(2); (f)(1); (g)(3); (h)(E). Lastly, imported EQ biosolids sold in bags of 50 pounds or less have been exempted from the requirement to obtain a certificate of approval.

Finally, to ensure that land application of biosolids or stabilized septage do not present a potential threat to groundwater language has been added under §6-1307(d) to clarify that an application site cannot be certified unless it demonstrates that it is in compliance with the Groundwater Protection Rule and Strategy.

Listing of All Changes Made to Rule

Citation	Comment	Change Made
§6-101	Program	Removed listing of statutory reference topics upon legal recommendation.
§6-102	Program	Added language clarifying the presumption of compliance with the Vermont Groundwater Protection Rule and Strategy for facilities in compliance with the Solid Waste Management Rules.
§6-201 Definitions	4	Added: “Friable asbestos” definition
§6-201 Definitions	Program	Edited “Adjoining landowners” to read “adjoining Property Owners” to be consistent with 10 V.S.A. 170. Change applied throughout rule whenever “adjoining landowners” was used.
§6-201 Definitions	5	Corrected spacing between “closure” and “clean wood” definitions
§6-201 Definitions	6	Edited: “Composting” definition
§6-201 Definitions	7	Edited: “Construction and Demolition Waste” Definition
§6-201 Definitions	Program	Added: a new “Slaughterhouse Waste” definition
§6-201 Definitions	9	Changed: “Organics” to “Organic Solid Waste”
§6-201 Definitions	10	Added: “Landfill” definition
§6-201 Definitions	14	Edited: “Final Grades” definition
§6-201 Definitions	Program, 189	Added: “Groundwater Compliance Points” definition
§6-201 Definitions	Program, 189	Added: “Groundwater Protection Rule and Strategy” definition and Acronym
§6-201 Definitions	20, 21	Changed: “Organics” to “Organic Solid Waste”
§6-201 Definitions	Program	Removed: Definition for “guidelines” as the term is not used within the Rules.
§6-201 Definitions	22, 23	Changed “organic drop-off” to “food residual drop-off” and edited definition
§6-201 Definitions	27	Changed: “organics” to “organic solid wastes” and edited: “Organic Solid Waste Recovery Facility” definition
§6-201 Definitions	33	Added: “Domestic Septage” definition
§6-201 Definitions	Program	Edited: amended language in sludge definitions and throughout Rule that referred to wastewater treatment plants to read wastewater treatment facilities
§6-302(a)(11)	28	Added: the exemption for glycerol management at off farm anaerobic digesters
§6-302(a)	Program	Removed: exemptions for the use of Short Paper Fiber and Wood Ash. In order to be exempt, users must use these materials in accordance with Program Procedures, which have not been moved into the Rule during this revision. The guidance on the use of these materials will remain in a Procedure.
§6-302(a)(19)	Program	Added: exemption from certification for institutions offering food residual collection for employees
§6-304(a)	32	Corrected citation numbering issue in clean copy version of the rules
§6-304(h)	Program	Removed reference to the Regulated Medical Waste Procedure and clarified the requirements needed to accept Regulated Medical Waste for Disposal.
§6-402(a)	36	Edited the description of a solid waste management entity
§6-402(b)(2)	37	Typo correction

§6-402(b)(4)	38	Language correction
§6-402(b)(6)	39	Language correction
§6-402(b)(7)	40	Language correction
§6-501	Program	Edited Table for readability
§6-503(a)	43	Typo correction
§6-503(a)(4)	44	Provisional certification language deleted
§6-503(c)(2)	45	Changed “organic drop-off” to “food residual drop-off”
§6-504(e)(12-13)	46	Corrected spacing between (e)(12) and (e)(13)
§6-504(e)(23)	51	Corrected to reflect the types of additional information that the Secretary may request an applicant submit to supplement other required materials.
§6-505(a)(2)(N)	54	Removed requirement, duplicative of (a)(2)(M)
§6-507(c)	Program	Added language clarifying that the Secretary may request additional application submittals beyond the minimum listed by the Rule, as required to make a determination.
§6-601(a)	58	Typo correction
§6-601(b)(1)	59	Removed duplicative language
§6-601(b)(3)	60	Added language to provide a notice of administrative completeness to applicants within 15 days of application receipt
§6-602(3)	63	Typo correction
§6-606(a)	65	Added language to clarify the suspension or revocations of certification may be in whole, or in part.
§6-606	66	Removed reference to and requirements for for petition submittals. The process of determining whether there is a basis for a suspension or revocation of a certification lies with the Secretary and that determination could be based on any communications from the public or interested parties. The basis for such a determination by the Secretary remains within these Rules.
§6-703, Table A	72	Corrected the table to reflect a change in text regarding the minimum distance from waste management boundary to schools, daycare facilities, hospitals and nursing homes.
§6-703, Table A	73	Corrected accidental language removal
§6-704(a)	75	Clarified sentence language
§6-704(b)	Program	Corrected citation numbering error
§6-704(c)	76	Corrected spacing error
§6-704(f)	77	Typo correction
§6-704(g)	78	Added language for clarity
§6-705(b)	80	Corrected sentence structure
§6-706(c)(2)(B)	84	Added language to provide appropriate contact information and numbers.
§6-708(a)(4)	Program, 189	Added language to clarify that actions, according to the Groundwater Protection Rule and Strategy, that would be taken to address Preventative Action Level exceedances at points of compliance.
§6-708(b)(3)	Program, 189	Added language to clarify that actions, according to the Groundwater Protection Rule and Strategy, that would be taken to address groundwater standard exceedances at points of compliance.
§6-801(b)	Program	Clarified that financial responsibility is not required of registered facilities or categorical facilities.

§6-805(d)	91	Addition of the word ‘final’ to clarify which capping system the requirement is referring to.
§6-904(a)(1)	93	Typo correction
§6-904(i)	94	Edited to change the use of ‘organics’ to ‘organic solid waste’
§6-904(c)(4)	98	Edited to change the use of ‘organics’ to ‘organic solid waste’
§6-904(d)	99	Edited to differentiate requirements for storage and operational processes at facilities
§6-904(e)(1)	100	Edited to clarify language
§6-905(g)(1)	101	Corrected spacing error
§6-905(m)(1)	102	Typo correction
§6-906(b)	103	Corrected spacing error
§6-1001(b)	105	Typo correction
§6-1003(a)(1)	Program	Edited drinking water supply to read drinking water sources to be consistent with the definition
§6-1004	Program	Corrected spacing/numbering errors
§6-1004(c)	108	Removed duplicative language
§6-1004(h)	Program	Edited to add potential waiver of gas collection requirements, in addition to leachate collection requirements if landfills accepting specific waste components (monofills etc.) can demonstrate there is no potential source of leachate or landfill gas that may be harmful.
§6-1004(i)(3)(c)	113	Clarified that interim cap provides erosion and leachate production protection and edited for sentence structure
§6-1004(k)(1)(b)	115	Separated leachate migration and leachate detections as separate performance standards of the leachate collection and removal systems.
§6-1004(j)(1)	116	Added language to provide for the ability to store leachate on a liner for approved contingency events other than storm events (e.x. leachate storage tank inspections)
§6-1004(j)(6)(C)	119	Edited for language clarity
§6-1004(k)(2)	120	Corrected spacing/numbering error
§6-1004(l)(3)	121	Clarified that the use of interim caps is optional
§6-1004(i)(2)(C)	128	Added language to address an additional purpose of the primary liner
§6-1005(c)(6)	137	Edited for language clarity
§6-1005(d)(1)(F)	138	Edited for language clarity
§6-1005(f)(3)	141	Edited to clarify that liquids within the secondary detection and collection system may not necessarily be leachate
§6-1006(a)(3)(C)(iv)	Program	Removed duplicative language addressing the Groundwater Protection Rule and Strategy and Water Quality Standard compliance
§6-1009(b)(5)	154	Edited section title for clarity and removed language defining the standard for stormwater system performance evaluation to reflect evaluation against design standards that a landfill is closed under.
§6-1009(e)	155	Added language to address ongoing obligations of landfill owners following custodial care approval
§6-1102(c)	171	Edited: Anaerobic Digestion” Definition
§6-1102(n)	172	Edited: “Farm” Definition
§6-1102(s)	157	Changed: “Organics” to “Organic Solid Waste”
§6-1102(e)	158	Edited: “Compost” Definition
§6-201 & §6-1102(g)	159	Edited: “Composting” Definition
§6-1102(k)	161, 162	Edited: “Contaminant” Definition

§6-1103(a)(1)	163	Edited: exemption modified to be contingent upon the importation of solid waste not the overall total which penalized farms who are already composting manure/vegetation.
§6-1103(a)(9)	167	Edited: additions and clarifications to animal burial requirements, edited drinking water supplies to read drinking water sources to be consistent with the definitions
§6-1104(b)	168	Edited: organizational correction applied to the vermicomposting citation
§6-1106(b)	Program	Edited: to allow for engineered solutions to siting and as appropriate.
§6-1107(a)(4)(A)	175	Changed: “waste management lagoon” to “waste storage facility” in conformance with AAFCM definitions
§6-1107 (a)(6)(D)(i)	176	Edited: added that land application of curing runoff shall be based upon an agronomic assessment of the soils.
§6-1108(b)(4)(A)	169	Edited: cleaned up language and revision artifacts
§6-1202(b)(4)	Program	Reorganized the exemption requirements to read better
§6-1202(b)(4)(viii)	177	Edited: land application of digestate to align with AAFCM.
§6-1202(a)	25	Changed the name of organics drop-off facilities to ‘food residuals drop-off facilities for clarity
§6-1202(c)	25	Edited: Organics to Organic Solid Waste
§6-1302(a)	Program	Edited incorrect reference §6-1303(e) to §6-1307(f)
§6-1302(b)	182	Edited incorrect reference §6-1304 to §6-1303
§6-1303(a)(4)	189	Added language that EQ biosolids produced in, or imported into, VT shall be tested for all parameters listed under §6-1306 (n), which includes PFAS
§6-1303(b)(3)	Program	Edited incorrect reference §6-1304 to §6-1303
§6-1303(b)(1)(B); §6-1303(b)(1)(C);		Edited incorrect reference @ (B) from §6-1303(g) to §6-1303(h); and at (C) from §6-1303(h) to §6-1303(i)
§6-1303(c)(2)(A); (B)		Change to language referencing effective date of the Rules
§6-1303(c)(2)(A)(iii); §6-1303(c)(2)(B)(iii); §6-1303(e)(2); and §6-1303(f)(1)	189	Added language that an application for a certificate of approval for importing EQ biosolids into VT must include results for all parameters listed under §6-1306(n), which includes PFAS, and that if testing requirements are not met, certificate may be revoked, and that for reapproval, testing results must be provided
§6-1303(d)	Program	Added language that COA will be issued by Secretary, in writing...
§6-1303(f)	Program	Edited incorrect reference to subsection (e)
§6-1303(f)	Program	Deleted extraneous language “once again” (2)&(3), “reasonably” (6)
§6-1303(g)(3)	189	Added language that EQ biosolids produced in, or imported into, VT shall have a label indicating that the product may contain PFAS
§6-1303(g)(4)&(5)	Program	Deleted “typical”; Moved statement following (8) regarding guaranteed nutrient content and registration with VAAFCM under (4)
§6-1303(h)(2)(E)	189	Added reporting requirement for imported EQ biosolids to include testing results under §6-1306 (n), which includes PFAS
§6-1303(i)(1)(c)	Program	Edited incorrect reference (h)(2)(F) to (h)(2)
§6-1305	Program	Edited: Wastewater Treatment Plant to wastewater treatment facility
§6-1305(c)(4)	Program, 189	Added that biosolids quality must be documented as required in §6-1306 (n) and (o) prior to application to the land
§6-1306(a)	Program, 186	Added additional prohibitions for seasonal land application based on VAAFCM manure spreading ban dates for flood plain farmers along with

		language allowing the Secretary to approve application on a case-by-case basis upon determination that weather conditions and application techniques will not result in runoff, abnormal nutrient loss, or threat to health or the environment.
§6-1306(m)(2)	Program	Changed 6 month to a 12 month prohibition on grazing animals at land application sites
§6-1306(n)(2)	Program, 189	Clarified parameters that biosolids or septage intended for land application must be tested for, including PFAS and additional parameters as determined to be necessary to prevent a threat to human health and the environment
§6-1306(o)(2)	Program	Changed the limit for PCBs in biosolids or septage intended for land application from 10 mg/kg to 1 mk/kg (in consult with VDH)
§6-1306(r) Table 2	Program, 189	Corrected reference to §6-1307(q) - Table 1 and added PFAS as a monitoring parameter for soils, groundwater and plant tissue for land application certifications, along with monitoring frequency
§6-1306(s)	Program	Added that the Secretary may require materials indicated in Table 2 to be tested for additional parameters as determined necessary
§6-1307(a)	Program	Changed “plants” to “facilities” to be consistent
§6-1307(d)	Program	Added language that no land application site can be certified unless it demonstrates compliance with the Groundwater Protection Rule and Strategy
§6-1307(f)	Program	Changed “plants” to “facilities” to be consistent
§6-1308(b)	Program	Edited: deleted “or dairy wastes”
§6-1309	Program	Changed “plants” to “facilities” to be consistent
Appendix A	Program	Edited to remove language limiting the issuance of letters of credit to financial institutions that are were regulated and examined by the State of Vermont.
Appendix C	Program	Added language for clarity that the fees established by statute will supersede the fees listed in the table, should there being any changes to statute following the effective date of these Rules.